

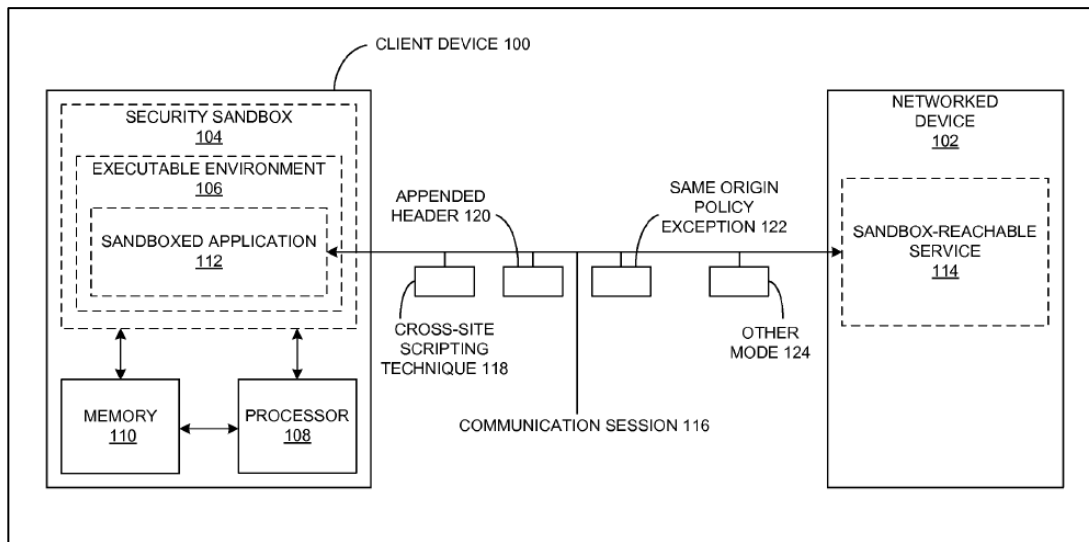
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I. BACKGROUND

The '668 Patent was filed on May 28, 2013, issued on May 5, 2015, and is titled “Real-Time and Retargeted Advertising on Multiple Screens of a User Watching Television.” The '356 Patent was filed on December 29, 2015, issued on July 5, 2016, and is titled “Targeting with Television Audience Data Across Multiple Screens.” The Asserted Patents share a common specification. The Asserted Patents generally relate to “[a] method, apparatus, and system related to relevancy improvement through targeting of information based on data gathered from a networked device associated with a security sandbox of a client device.” '668 at 2:15-18.

The specification describes Figure 1 as “a block diagram depicting a system of automatic bidirectional communication (e.g., sending and receiving information in both directions without prior configuration by a human) between multiple devices, according to one embodiment.” '668 Patent at 5:54–57.

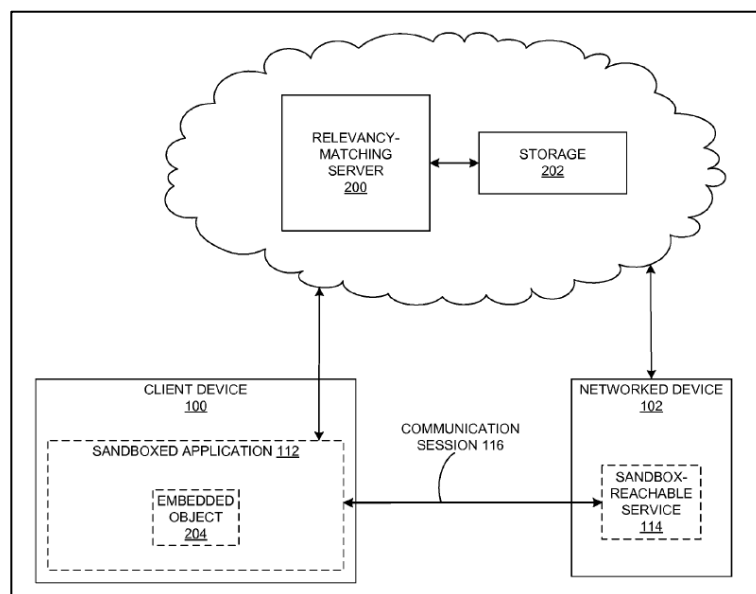


Id. at Figure 1. Figure 1 includes “a client device 100, a networked device 102, a security sandbox 104, an executable environment 106, a processor 108, a memory 110, a sandboxed application 112, a sandbox-reachable service 114, a communication session 116, a cross-site scripting technique 118, an appended header 120, a same origin policy exception 122, and an other mode

124.” *Id.* at 5:58–65. The specification states that “the client device 100 may automatically establish the communication session 116 between the sandboxed application 112 and the sandbox-reachable service 114 of the networked device 102.” *Id.* at 6:6–9.

The specification further specifies that “[t]he communication session 116 may be established between the sandboxed application 112 and the sandbox-reachable service 114 through the cross-site scripting technique 118, the appended header 120, the same origin policy exception 122, and/or the other mode 124 of bypassing a number of (e.g., at least one) access controls of the security sandbox 104.” *Id.* at 6:9–16. The specification adds that “networked device 102 may generate a primary data 500 and/or a preliminary data 702,” and that “[t]he primary data 500 and/or the preliminary data 702 may be associated with a user 902.” *Id.* at 6:28–32.

The specification describes Figure 2 as illustrating “a system of bidirectional communication between a relevancy-matching server 200, the client device 100, and the networked device 102, according to one embodiment.” *Id.* at 11:45–47.



Id. at Figure 2. The specification states that “the relevancy-matching server 200 may be a computer hardware system dedicated to matching, using a processor and a memory, a targeted

data 800 with the primary data 500 based on a relevancy factor associated with the user 902.” *Id.* at 11:56–60. The specification further states that “[t]he relevancy-matching server 200 may match the targeted data 800 with the primary data 500 by searching the storage 200 for a matching item and/or a related item based on the relevancy factor.” *Id.* at 12:17–20.

For example, “[t]he client device 100 may communicate the primary data 500 to the relevancy-matching server 200 through the embedded object 204.” *Id.* at 13:9–11. “When the relevancy-matching server 200 has the primary data 500, the relevancy-matching server 200 may use the primary data 500 to select the targeted data 800 to render to the user 902.” *Id.* at 13:11–14. The specification adds that “[t]he relevancy-matching server 200 may synchronize the targeted data 800 on the client device 100 to the primary data 500 on the networked device 102.” *Id.* at 13:14–17.

Claim 1 of the ’668 Patent is an exemplary claim and recites the following elements (disputed term in italics):

1. A system comprising:
a networked device configured to:
automatically announce a sandbox-reachable service of the
networked device to a discovery module; and
a relevancy-matching server configured to match a targeted data
with a primary data based on a relevancy factor associated
with the user; and
a client device configured to:
automatically process an identification data of at least one of the
networked device and the sandbox-reachable service of the
networked device from the discovery module,
automatically associate with the networked device through a
sandboxed application of the client device communicatively
coupled to the sandbox-reachable service based on the
identification data,
process an embedded object from the relevancy-matching server
through the sandboxed application,
gather the primary data through at least one of the embedded
object and the sandboxed application, and
communicate the primary data to the relevancy-matching server
through the embedded object;

wherein the client device is further configured to: constrain an executable environment in a security sandbox, execute the sandboxed application in the executable environment, and automatically establish a communication session between the sandboxed application and the sandbox-reachable service through at least one of a cross-site scripting technique, an appended header, a same origin policy exception, and an other mode of bypassing a number of access controls of the security sandbox, and wherein the relevancy-matching server is configured to match the targeted data with the primary data in a manner such that the relevancy-matching server is configured to search a storage for at least one of a matching item and a related item based on the relevancy factor comprising at least one of a category of the primary data, a behavioral history of the user, a category of the sandboxed application, and an other information associated with the user.

Claim 1 of the '356 Patent is an exemplary claim and recites the following elements (disputed term in italics):

1. A system comprising:
a television to generate a fingerprint data;
a *relevancy-matching server to:*
match primary data generated from the fingerprint data with targeted data, based on a relevancy factor, and
search a storage for the *targeted data*;
wherein the primary data is any one of a content identification data and a content identification history;
a *mobile device capable of being associated with the television to:*
process an embedded object,
constrain an executable environment in a security sandbox, and
execute a sandboxed application in the executable environment;
and
a *content identification server to:*
process the fingerprint data from the television, and
communicate the primary data from the fingerprint data to any of a number of devices with an access to an identification data of at least one of the television and an automatic content identification service of the television.

II. APPLICABLE LAW

A. Claim Construction

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’ ” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To determine the meaning of the claims, courts start by considering the intrinsic evidence. *Id.* at 1313; *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004); *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). The intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *Phillips*, 415 F.3d at 1314; *C.R. Bard, Inc.*, 388 F.3d at 861. The general rule is that each claim term is construed according to its ordinary and accustomed meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the patent. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int’l Trade Comm’n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014) (“There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.”) (vacated on other grounds).

“The claim construction inquiry . . . begins and ends in all cases with the actual words of the claim.” *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998). “[I]n all aspects of claim construction, ‘the name of the game is the claim.’ ” *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298 (Fed. Cir. 2014) (quoting *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998)). First, a term’s context in the asserted claim can be instructive. *Phillips*, 415 F.3d at 1314. Other asserted or unasserted claims can also aid in determining the claim’s meaning, because claim terms are typically used consistently throughout the patent. *Id.* Differences among the claim terms can also assist in understanding a term’s meaning. *Id.* For

example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id.* at 1314–15.

“[C]laims ‘must be read in view of the specification, of which they are a part.’ ” *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc)). “[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’ ” *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). But, “ ‘[a]lthough the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.’ ” *Comark Commc’ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)); *see also Phillips*, 415 F.3d at 1323. “[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

The prosecution history is another tool to supply the proper context for claim construction because, like the specification, the prosecution history provides evidence of how the U.S. Patent and Trademark Office (“PTO”) and the inventor understood the patent. *Phillips*, 415 F.3d at 1317. However, “because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes.” *Id.* at 1318; *see also Athletic*

Alternatives, Inc. v. Prince Mfg., 73 F.3d 1573, 1580 (Fed. Cir. 1996) (ambiguous prosecution history may be “unhelpful as an interpretive resource”).

Although extrinsic evidence can also be useful, it is “less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc.*, 388 F.3d at 862). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or may not be indicative of how the term is used in the patent. *Id.* at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert’s conclusory, unsupported assertions as to a term’s definition are entirely unhelpful to a court. *Id.* Generally, extrinsic evidence is “less reliable than the patent and its prosecution history in determining how to read claim terms.” *Id.* The Supreme Court recently explained the role of extrinsic evidence in claim construction:

In some cases, however, the district court will need to look beyond the patent’s intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period. *See, e.g., Seymour v. Osborne*, 11 Wall. 516, 546 (1871) (a patent may be “so interspersed with technical terms and terms of art that the testimony of scientific witnesses is indispensable to a correct understanding of its meaning”). In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence. These are the “evidentiary underpinnings” of claim construction that we discussed in *Markman*, and this subsidiary factfinding must be reviewed for clear error on appeal.

Teva Pharm. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 841 (2015).

B. Functional Claiming and 35 U.S.C. § 112, ¶ 6 (pre-AIA) / § 112(f) (AIA)²

A patent claim may be expressed using functional language. *See* 35 U.S.C. § 112, ¶ 6; *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1347–49 & n.3 (Fed. Cir. 2015) (en banc in relevant portion). Section 112, Paragraph 6, provides that a structure may be claimed as a “means . . . for performing a specified function” and that an act may be claimed as a “step for performing a specified function.” *Masco Corp. v. United States*, 303 F.3d 1316, 1326 (Fed. Cir. 2002).

But § 112, ¶ 6 does not apply to all functional claim language. There is a rebuttable presumption that § 112, ¶ 6 applies when the claim language includes “means” or “step for” terms, and that it does not apply in the absence of those terms. *Masco Corp.*, 303 F.3d at 1326; *Williamson*, 792 F.3d at 1348. The presumption stands or falls according to whether one of ordinary skill in the art would understand the claim with the functional language, in the context of the entire specification, to denote sufficiently definite structure or acts for performing the function. *See Media Rights Techs., Inc. v. Capital One Fin. Corp.*, 800 F.3d 1366, 1372 (Fed. Cir. 2015) (§ 112, ¶ 6 does not apply when “the claim language, read in light of the specification, recites sufficiently definite structure” (quotation marks omitted) (citing *Williamson*, 792 F.3d at 1349; *Robert Bosch, LLC v. Snap-On Inc.*, 769 F.3d 1094, 1099 (Fed. Cir. 2014))); *Williamson*, 792 F.3d at 1349 (§ 112, ¶ 6 does not apply when “the words of the claim are understood by persons of ordinary skill in the art to have sufficiently definite meaning as the name for structure”); *Masco Corp.*, 303 F.3d at 1326 (§ 112, ¶ 6 does not apply when the claim includes an “act” corresponding to “how the function is performed”); *Personalized Media Communications, L.L.C. v. International Trade Commission*, 161 F.3d 696, 704 (Fed. Cir. 1998) (§ 112, ¶ 6 does not apply when the claim

² Because the applications resulting in the Asserted Patents were filed before September 16, 2012, the effective date of the America Invents Act (“AIA”), the Court refers to the pre-AIA version of § 112.

includes “sufficient structure, material, or acts within the claim itself to perform entirely the recited function . . . even if the claim uses the term ‘means.’ ” (quotation marks and citation omitted)).

When it applies, § 112, ¶ 6 limits the scope of the functional term “to only the structure, materials, or acts described in the specification as corresponding to the claimed function and equivalents thereof.” *Williamson*, 792 F.3d at 1347. Construing a means-plus-function limitation involves multiple steps. “The first step . . . is a determination of the function of the means-plus-function limitation.” *Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc.*, 248 F.3d 1303, 1311 (Fed. Cir. 2001). “[T]he next step is to determine the corresponding structure disclosed in the specification and equivalents thereof.” *Id.* A “structure disclosed in the specification is ‘corresponding’ structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim.” *Id.* The focus of the “corresponding structure” inquiry is not merely whether a structure is capable of performing the recited function, but rather whether the corresponding structure is “clearly linked or associated with the [recited] function.” *Id.* The corresponding structure “must include all structure that actually performs the recited function.” *Default Proof Credit Card Sys. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1298 (Fed. Cir. 2005). However, § 112 does not permit “incorporation of structure from the written description beyond that necessary to perform the claimed function.” *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999).

For § 112, ¶ 6 limitations implemented by a programmed general purpose computer or microprocessor, the corresponding structure described in the patent specification must include an algorithm for performing the function. *WMS Gaming Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999). The corresponding structure is not a general purpose computer but rather

the special purpose computer programmed to perform the disclosed algorithm. *Aristocrat Techs. Austl. Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008).

III. LEVEL OF ORDINARY SKILL IN THE ART

It is well established that patents are interpreted from the perspective of one of ordinary skill in the art. *See Phillips*, 415 F.3d at 1313 (“[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.”). The Federal Circuit has advised that the “[f]actors that may be considered in determining the level of skill in the art include: (1) the educational level of the inventors; (2) the type of problems encountered in the art; (3) prior art solutions to those problems; (4) the rapidity with which innovations are made; (5) sophistication of the technology; and (6) education level of active workers in the field.” *Env’tl Designs, Ltd. v. Union Oil Co. of California*, 713 F.2d 693, 696 (Fed. Cir. 1983). “These factors are not exhaustive but are merely a guide to determining the level of ordinary skill in the art.” *Daiichi Sankyo Co. Ltd. v. Apotex, Inc.*, 501 F.3d 1254, 1256 (Fed. Cir. 2007).

The parties essentially agree that a person of ordinary skill in the art would have at least a bachelor degree in computer science, electrical engineering, or a related discipline and 2-3 years of experience. Plaintiff submitted a declaration of Dr. Vijay Madiseti, in which he opines that “a POSITA in this timeframe would have been someone with at least a bachelor degree in computer science, electrical engineering, or a related discipline and 2-3 years of experience. Alternatively, a POSITA may have been someone with an advanced degree in computer science, electrical engineering, or a related discipline.” Docket No. 99-13 at 12 (Vijay Madiseti Decl. at ¶ 33). Defendant submitted a declaration of Dr. Michael Shamos, in which he states that he generally agrees with Dr. Madiseti description of level of education. Docket No. 104-1 at 5 (Michael

Shamos Decl. at ¶ 15). Defendant argued in its brief that a “POSITA would need an undergraduate degree in computer science or electrical engineering, or equivalent experience, and at least three years of industry or research experience in computer networking and audio and video systems, including exposure to fingerprinting, watermarking, content identification, device and service discovery, sandboxing, circumvention of sandbox protection, and relevancy matching to identify targeted data.” Docket No.104 at 10.

As an initial matter, the Court finds that the differences between the parties’ descriptions of the person of ordinary skill in the art are not significant for the purpose of claim construction. Having considered the parties’ proposals, and the factors that may be considered in determining the level of skill in the art, the Court finds that a person of ordinary skill in the art would have at least a bachelor degree in computer science, electrical engineering, or a related discipline, and a working knowledge of the technologies implemented in “networking, data recognition systems, and data recommendation systems.” ’668 Patent at 1:38-40.

IV. CONSTRUCTION OF AGREED TERMS

The parties agreed to the constructions of the following terms/phrases:

Claim Term/Phrase	Agreed Construction
“communicatively coupled” (’668 Patent, claims 11, 21, 25) (’356 Patent, claims 10, 14, 18)	“connected in a way that permits communication”
“content identification data” (’356 Patent, claims 1, 10, 14, 18)	“information used to identify content”
“discovery module” (’668 Patent, claims 11, 19, 21, 29)	“software, hardware, firmware, and/or integrated circuit to detect devices and/or services on a network”

“fingerprint data” (’356 Patent, claims 1, 2, 10, 13, 14, 17, 18)	“data representing characteristic features obtained, detected, extracted, quantized, and/or hashed from audio or visual content”
“primary data” (’668 Patent, claims 11, 14, 15, 19, 21, 24, 25, 29) (’356 Patent, claims 1, 10, 11, 13, 14, 17, 18, 19)	“data that may be associated with a user and matched with targeted data”
“relevancy factor” (’668 Patent, claims 11, 21) (’356 Patent, claims 1, 10, 11, 14, 18, 19)	“criterion used for matching targeted data with primary data”
“sandbox-reachable service” (’668 Patent, claims 11, 15, 19, 21, 25, 29)	“service that can be discovered and/or communicated with from within a security sandbox”
“sandboxed application” (’668 Patent, claims 11, 14, 16, 21, 24, 26) (’356 Patent, claims 1, 10, 14)	“software or application that runs in a security sandbox”
“security sandbox” (’668 Patent, claims 11, 21) (’356 Patent, claims 1, 2)	“environment that constrains operations available to an application”
“embedded object” (’668 Patent, claims 11, 14, 21, 24) (’356 Patent, claims 1, 2)	“object in an application or webpage linked to an external source, such as a script, an image, a player, an iframe, or other external media”

Docket No. 116-1 at 67, 75, 79, 84, 90, 103, 113, 119, 127, 133. In view of the parties’ agreement on the proper construction of the identified terms, the Court hereby **ADOPTS** the parties’ agreed constructions.

During the claim construction hearing, the parties agreed to the construction of the

following term:

Claim Term/Phrase	Agreed Construction
“pairing server” (’356 Patent, claims 4, 9, 11, 15, 19)	“server that communicatively couples the television and the mobile device”

The Court agrees that “pairing server” should be construed to mean “server that communicatively couples the television and the mobile device.” The specification states that “[t]he pairing server 300 exists in the cloud 712 and is *communicatively coupled* to the client device 100 and the networked media device 102 of FIG. 3.” ’668 Patent at 13:29–31 (emphasis added). As indicated by the plain and ordinary meaning of the term “pairing,” and the related disclosure, the recited “pairing server” enables devices on the same network to pair by communicatively coupling the devices. Indeed, the specification states that “[t]he pairing server 300 may be configured to receive in the announcement from the networked device 102 and *to communicate* to the client device 100 the identification data 304 when a shared network is determined to be commonly associated with the client device 100 and the networked device 102.” *Id.* at 13:45–50 (emphasis added). Likewise, the specification states that “[t]he pairing server 300 may also provide a relay service (e.g., transmits a data between two terminals that are incapable of communicating directly) between the client device 100 and the networked device 102.” *Id.* at 13:51–54. In view of the intrinsic evidence and the parties’ agreement on the proper construction of the term “pairing server,” the Court hereby **ADOPTS** the parties’ agreed construction.

V. CONSTRUCTION OF DISPUTED TERMS

The parties’ dispute focuses on the meaning and scope of eleven terms/phrases in the Asserted Patents.

1. “communication session”

<u>Disputed Term</u>	<u>Plaintiff’s Proposal</u>	<u>Defendant’s Proposal</u>
“communication session”	“period of time during which information is sent and/or received between devices either directly or indirectly (e.g. through a server)”	“period of time during which there is a bidirectional exchange of information over a network connection between devices”

a) The Parties’ Positions

The parties agree that a “communication session” is a period of time during which communication occurs. The parties dispute: (1) whether there must be a bidirectional exchange of information; and (2) whether the exchange of information must take place over a network connection between devices. Plaintiff contends that the proper construction includes one-way and two-way sending and/or receiving of information. Docket No. 99 at 13. Plaintiff argues that Defendant’s construction improperly imports additional limitations from certain embodiments while excluding other embodiments. *Id.* at 13 (citing ’668 Patent at Fig. 7, 20:50–56). Plaintiff further argues that the Asserted Patents use the term communication to include both one-way and two-way communication. Docket No. 99 at 13 (citing ’668 Patent at 38:45–59, 41:33–40, 5:54–64, 9:65–10:8). Plaintiff contends that if the term “communication” was intended to be limited to only two-way communication, the word “bidirectional” would be superfluous and the Asserted Patents would not use the word “communication” to describe one-way communication. Docket No. 99 at 13.

Plaintiff also argues that its construction clarifies that communication sessions may include both direct and indirect communication (*e.g.* through a server). *Id.* at 13 (citing ’668 Patent at 11:6–10, Figure 7). Plaintiff contends that technical dictionaries also support its construction. Docket No. 99 at 14–15 (citing Docket No. 99-6 (Webster’s New World Telecom Dictionary (2008)), Docket No. 99-7 (Comprehensive Dictionary of Electrical Engineering, 2d Ed. (2005))).

Defendant responds that the specification uniformly characterizes a “communication session” as comprising a bidirectional exchange of information and never depicts or describes a communication session as comprising only one-way communication. Docket No. 104 at 12–13 (citing ’668 Patent at 11:5–6, 5:54–57, 5:64–65, 11:3–4, 11:45–52, Figures 1 and 2). Defendant argues that Plaintiff’s attempt to find support for a one-way communication session in the patents confuses a communication session (which must be established between devices) with a mere communication (a simple action by any device). Docket No. 104 at 14 (citing ’668 Patent at 38:47–50, 38:28–39:1). According to Defendant, the Asserted Patents never describe a one-way communication session. Docket No. 104 at 14.

Defendant also argues that the Asserted Patents do not describe Figure 7 as showing a communication session between the networked device and client device. Docket No. 104 at 14 (citing ’668 Patent at 19:28–37). According to Defendant, Figure 7 shows one example of information being relayed from the networked device to the client device via an intermediary server, with no indication that it depicts all data ever sent between the devices or that no data is ever sent from the client device to the networked device. Docket No. 104 at 14.

Defendant further argues that the specification and claims demonstrate that a communication session also requires a network connection between devices. Docket No. 104 at 15 (citing ’668 Patent at 1:38–39, 2:18–25, 2:46–50, 6:6–15, 6:32–37, 11:1–11, 13:31–36, 16:9–13, 51:31–33, 53:25–27, 55:22–24). Defendant contends that the characteristics of a communication session cited by Plaintiff confirms it comprises a network connection between devices. Docket 104 at 15 (citing ’668 Patent at 6:9–15, 11:12–44). Defendant also contends that the discovery protocols cited by Plaintiff allow devices to discover each other so that specific devices may establish a communication session, not to communicate through an existing

communication session. Docket No. 104 at 15–16 (citing ’668 Patent at 11:37–39, 2:56–58, 3:9–18, 14:1–44).

Finally, Defendant argues that Plaintiff’s construction covers any communication, which improperly reads “session” out of the claims. Docket No. 104 at 16. Defendant contends that under Plaintiff’s construction a radio station that broadcasts a radio signal to millions of unidentified radios would share a “communication session” with any radio that happened to be tuned to its broadcast frequency. *Id.* Defendant also contends that without the need for a network connection between devices, devices that communicate only twice would share a “communication session” spanning any time period. *Id.*

Plaintiff replies that the Asserted Patents disclose two-way communication sessions and one-way communications. Docket No. 109 at 3 (citing ’668 Patent at 38:22–47, 18:58–67, 19:4–27, Figures 1, 2, 5, and 6). Plaintiff argues that Figure 7 depicts a “communication session.” Docket No. 109 at 4 (citing ’668 Patent at 20:50–56, 21:9–11, claim 14). Plaintiff contends that in the context of the entire claim language and the patent, it is clear that “communication session” is merely one element in a system, and that “communication session” with the other claim limitations together define the patented invention. Docket No. 109 at 4. Plaintiff further argues that there is no need to import a “networked device” limitation into the term “communication session.” *Id.* According to Plaintiff, the Asserted Patents make clear that the networked device and client device can have a communication session even when they are not on the same network. Docket No. 109 at 5 (’668 Patent at 38:28–31, 38:47–48, 38:50–53, 39:1–10).

For the following reasons, the Court finds that the term **“communication session”** should be construed to mean **“period of time during which information is sent and received either directly or indirectly.”**

b) Analysis

The term “communication session” appears in claims 1, 4, 11, 14, 21, and 24 of the ’668 Patent. The Court finds that the term is used consistently in the claims and is intended to have the same general meaning in each claim. The Court further finds that the recited “communication session” is a period of time during which information is sent and received (*i.e.*, bidirectional exchange). The claims indicate that the “communication session” is between the networked device and the client device. *See, e.g.*, ’668 Patent at Claim 1 (“a networked device configured to: automatically announce a sandbox-reachable service of the networked device . . . a client device configured to: . . . automatically establish a communication session between the sandboxed application and the sandbox-reachable service . . .”).

The specification consistently states that the “communication session” between these two devices is a bidirectional communication. For example, the specification states that “FIG. 1 is a block diagram depicting a system of *automatic bidirectional communication (e.g., sending and receiving information in both directions without prior configuration by a human)* between multiple devices, according to one embodiment.” *Id.* at 5:54–57 (emphasis added). The specification then explicitly states that “the client device 100 communicates *bidirectionally* with the networked device 102 of FIG. 1.” *Id.* at 5:64–65 (emphasis added). Similarly, the specification states that “FIG. 2 depicts *a system of bidirectional communication* between a relevancy-matching server 200, the client device 100, and the networked device 102, according to one embodiment.” *Id.* at 11:45–47 (emphasis added). Figures 1 and 2 further illustrate the bidirectional “communication session 116” with a two-sided arrow connecting a client device and a networked device. *Id.* at Figures 1 and 2.

Likewise, Figures 4, 10, and 11 illustrate and disclose a bidirectional communication

between a networked device and a client device. *Id.* at 4:17–21 (“FIG. 4 is a block diagram depicting a system of *bidirectional communication* between the client device 100 and the networked device 102 using an extension 404 of a security sandbox 104, according to one embodiment”) (emphasis added); 4:45–49 (“FIG. 10 is a block diagram of a system including a content identification server 1006 configured for automatic *bidirectional communication* with a number of capture servers 1008A, 1008B, the client device 100, and the networked device 102, according to one embodiment.”) (emphasis added); 4:50–54 (“FIG. 11 is a block diagram of a system of automatic *bidirectional communication* between the client device 100 and the networked device 102 involving the content identification server 1006 and a plurality of other networked devices 1400A, 1400B, according to one embodiment.”) (emphasis added).

These embodiments further indicate that the bidirectional communication is automatic. *See, e.g., id.* at 14:66–15:2 (“When the client device 100 pairs with the networked device 102, the automatic bidirectional communication may comprise the client device 100 pushing the media data 1004 to the networked device 102.”). The “automatic bidirectional communication” addresses the problem of a user being “unable to configure the networked device to share the information with the other networked device.” *Id.* at 1:65–67.³ Accordingly, the Court finds that the intrinsic evidence indicates that the recited “communication session” means “a period of time during which information is sent and received.”

Arguing against the bidirectional communication limitation, Plaintiff contends that the patents include embodiments of one-way communication. Docket No. 99 at 13 (referring to Figure 7); Docket No. 109 at 3 (referring to Figures 5 and 6). Contrary to Plaintiff’s suggestion, the

³ The Court notes that the claims generally require “automatically establishing” a communication session, and thus “automatically” would be redundant and is not included in the Court’s construction.

specification never describes the “one-way communication” as a “communication session” between the networked device and the client device. Instead, the specification states that Figures 5 and 6 illustrate “a block diagram depicting the client device 100 *gathering a primary data 500* through a sandboxed application 112 [an executable code 600] and communicating the primary data 500 to the relevancy-matching server 200 through an image 502 [the executable code 600], according to one embodiment.” ’668 Patent at 4:22–32 (emphasis added). Thus, Figures 5 and 6 relate to the “gather[ing] the primary data” claim element, which is a different than “automatically establish[ing] a communication session.” *See, e.g., id.* at Claim 1 (*Compare* “gather the primary data through at least one of the embedded object and the sandboxed application” to “automatically establish a communication session between the sandboxed application and the sandbox-reachable service.”).

Similarly, the specification does not describe Figure 7 as illustrating a “communication session” between the networked device and client device. Instead, Figure 7 is an example of information being relayed from the networked device to the client device via an intermediary server. In other words, the specification does not suggest or indicate that it depicts all data that is sent between the devices, or that a “communication session” includes a one-way communication. Indeed, the specification explicitly states that “FIG. 7 is a block diagram depicting the client device 100 residing on a separate network from the networked device 102 and gathering the primary data 500 from an intermediary server 700, according to one embodiment.” *Id.* at 4:33–36; *see also id.* at 19:28–30 (“FIG. 7 is a block diagram depicting the client device 100 residing on a separate network from the networked device 102 and gathering the primary data 500 from the intermediary server 700, according to one embodiment.”). To be sure, the specification refers to “communication session 116 between the client device and the networked device 102,” but does

not illustrate “communication session 116” in Figure 7, like it does in the other figures. *Id.* at 20:50–56. Contrary to Plaintiff’s suggestion, the Court’s construction does not exclude the embodiment illustrated in Figure 7, because Figure 7 requires automatically establishing a bidirectional communication session.

Plaintiff also contends that the Assert Patents discuss “a low-bitrate communication in one-direction.” Docket No. 99 at 13. Plaintiff is correct that this example provides a one-way communication. However, this example refers to a “covert channel” the networked device may use to announce itself to the client device in order to “enable the communication session” (*i.e.*, before a communication session has even been established.). *See, e.g.*, ’668 Patent at 38:47–50 (“The covert channel may *enable the communication session 116* between the sandboxed application 112 and the sandbox-reachable service 114 without opening the networked device 102 to a security risk.”) (emphasis added). As indicated, the one-direction communication is not the recited “communication session 116.” Indeed, the specification states that “[t]he networked device 102 may also be configured to automatically announce the sandbox-reachable service 114 of the networked device 102 to a discovery module 302 *prior to* an establishment of the communication session 116 between the sandboxed application 112 and the sandbox-reachable service 114.” *Id.* at 6:33–37 (emphasis added).

In summary, Plaintiff’s contention that the recited “communication session” may be a one-way communication is inconsistent with the intrinsic evidence. Moreover, Plaintiff’s construction would cover any communication, and would improperly read “session” out of the claims. *See, e.g., Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335, 1348 (Fed. Cir. 2012) (rejecting claim construction because it “effectively reads [a] term [] out of the limitation”). Furthermore, the extrinsic evidence is consistent with the intrinsic evidence and defines “session”

as “[i]n communications, the time during which two computers maintain a connection.” Docket No. 104-4 at 4 (Microsoft Computer Dictionary); *see also* Docket No. 104-3 at 4 (Dictionary of Multimedia Terms & Acronyms) (defining “session” as “in telecommunications, a series of communications between two stations during one connection”). Accordingly, the Court finds “communication session” should be construed to mean a “period of time during which information is sent and received.”

Regarding the second issue related to Defendant’s proposed “network connection between devices,” the Court finds that it is unnecessary and could potentially confuse the jury. The specification makes clear that the networked device and client device can have a communication session even when they are not on the same network. The specification explicitly states that “[t]he networked device 102 and the client device 100 may not reside on the same network.” ’668 Patent at 39:1–2. For example, the specification states that “[w]hen the client device 100 and the networked device 102 are paired using the hidden signal of the networked device 102, the client device 100 and the networked device 102 may not be required to reside on a same network.” *Id.* at 38:28–31. Moreover, the claims recite that the communication session is “automatically established” between the networked device and the client device. Thus, Defendant’s construction is unnecessary and could confuse the jury by suggesting that the networked device and client device must be on the same network. Finally, in reaching its conclusion, the Court has considered the extrinsic evidence submitted by the parties, and given it its proper weight in light of the intrinsic evidence.

c) Court’s Construction

The Court construes the term **“communication session”** to mean **“period of time during which information is sent and received either directly or indirectly.”**

**2. “associate with . . .,” “associated with . . .,” “associating with . . .,”
“associate . . . with . . .”**

<u>Disputed Term</u>	<u>Plaintiff’s Proposal</u>	<u>Defendant’s Proposal</u>
“associate the television with the mobile device”	plain meaning / no construction needed	“exchange information to permit the television and mobile device to communicate with each other”
“mobile device capable of being associated with the television”	plain meaning / no construction needed	“mobile device capable of exchanging information to permit the mobile device and television to communicate with each other”
“client device configured to...associate with the networked device”	plain meaning / no construction needed	“client device configured to exchange information to permit the client device and networked device to communicate with each other”
“associating, by the client device, with the networked device”	plain meaning / no construction needed	“exchanging information, by the client device, to permit the client device and networked device to communicate with each other”

a) The Parties’ Positions

The parties dispute the meaning of “associate with” and variations of that phrase (collectively referred to as “associate”) in the context of associated networked devices and client devices. Plaintiff contends that the term is used in its plain and ordinary meaning throughout the Asserted Patents to describe various aspects of the claimed inventions. Docket No. 99 at 10 (citing ’668 Patent at 3:46–52, 11:60–63, Claims 1, 7, 8). Plaintiff argues that the specification describes information as “associated with a user” to mean information related to a user in some way, and describes a hardware address as “associated with the networked device” to mean a hardware address used to identify or signify a networked device. Docket 99 at 10-11 (’668 Patent at 1:48–51, 3:4–6). Plaintiff contends that the term also appears in several of the claims of the Asserted Patents in the same context. Docket 99 at 11 (citing ’668 Patent at Claims 1 and 2; ’356 Patent at Claims 4 and 7). Plaintiff further argues that the term comports with its well-understood plain and ordinary meaning. Docket No. 99 at 11 (citing Docket 99-3 (Merriam-Webster Collegiate Dictionary (2014)); Docket No. 99-4 (New Oxford American Dictionary (2010)); Docket No. 99-

5 (American Heritage Dictionary (2012))).

Plaintiff also argues that it would be improper to limit the meaning of certain uses of the term “associate” while interpreting all other uses of the term under its plain and ordinary meaning. Docket No. 99 at 11. Plaintiff contends that Defendant’s construction attempts to add a requirement that associated networked and mobile devices must have a two-way exchange of information. *Id.* at 12. Plaintiff further contends that Defendant’s construction would exclude Figure 7, which depicts the networked device communicating preliminary or primary data to the client device through the intermediary server. *Id.* (citing ’668 Patent at Figure 7, 19:28–21:37). Plaintiff argues that Defendant cannot import limitations into the claims unless the patentee clearly intended to do so. Docket No. 99 at 12.

Defendant responds that it seeks construction of “associate” because it has more than one ordinary meaning, and those ordinary meanings do not resolve the parties’ dispute. Docket No. 104 at 18. Defendant argues that Plaintiff admits the term takes on different meanings within the Asserted Patents. *Id.* at 19. Defendant further argues that none of the different meanings Plaintiff assigns to “associate” make sense when those meanings are applied to the disputed phrases. *Id.* According to Defendant, when one device associates with another, the devices associate through their communicatively coupled applications, confirming that the devices are not simply associating in any lay sense of the word. *Id.* at 20. Defendant also contends that the most straightforward interpretation in this context is that the associating device exchanges information (*e.g.*, in establishing a communication session) that permits communication between devices. *Id.*

Plaintiff replies that the use of the word “associate” in the phrases “associated with a user” and “associated with the networked device” does not diverge from the plain and ordinary meaning. Docket No. 109 at 5. Plaintiff argues that the surrounding description of the relationship informs

the reader about the degree of the relationship. *Id.* Plaintiff contends that the same plain and ordinary meaning applies to associations between client and networked devices. *Id.* Plaintiff further argues that Defendant’s construction excludes one-way communication embodiments through its construction of “associate.” *Id.* at 6 (citing ’668 Patent at Figs. 5–8, 19:28–21:37). Plaintiff also contends that it excludes embodiments in which a network device posts identification data at a URL for a client device to discover. Docket No. 109 at 6 (citing ’668 Patent at 6:43–46, 6:60–65, 7:5–27, 8:11–23).

For the following reasons, the Court finds that the phrase **“associate the television with the mobile device”** should be construed to mean **“enable the television to communicate with the mobile device,”** and the phrase **“mobile device capable of being associated with the television”** should be construed to mean **“mobile device capable of communicating with the television.”** The Court further finds that the phrase **“client device configured to . . . associate with the networked device”** should be construed to mean **“client device configured to . . . communicate with the networked device,”** and the phrase **“associating, by the client device, with the networked device”** should be construed to mean **“communicating, by the client, with the networked device.”**

b) Analysis

The phrase “associate the television with the mobile device” appears in claims 4, 11, and 19 of the ’356 Patent. The phrase “mobile device capable of being associated with the television” appears in claim 1 of the ’356 Patent. The phrase “client device configured to . . . associate with the networked device” appears in claims 1 and 21 of the ’668 Patent. The phrase “associating, by the client device, with the networked device” appears in claim 11 of the ’668 Patent. The Court finds that “associate” is used consistently in the claims and is intended to have the same general

meaning in each claim. The Court further finds that the intrinsic evidence indicates that “associating with” generally means “communicating with.”

The Summary section states that the client device “automatically process[es] an identification data of the networked device and/or the sandbox-reachable service,” then “*automatically associate[s] with* the networked device through a sandboxed application of the client device *communicatively coupled to the sandbox-reachable service* based on the identification data.” ’668 Patent at 2:31–38 (emphasis added). The specification further indicates that this process may take place via the pairing server. Specifically, the specification states that “[t]he pairing server 300 exists in the cloud 712 and is *communicatively coupled* to the client device 100 and the networked media device 102 of FIG. 3.” *Id.* at 13:28–31 (emphasis added).

Indeed, claim 4 of the ’356 Patent recites “pairing server to: associate the television with the mobile device.” Likewise, claim 1 of the ’668 Patent recites that the networked device “automatically announce a sandbox-reachable service of the networked device,” and that the client device “automatically associate with the networked device through a sandboxed application of the client device communicatively coupled to the sandbox-reachable service.” Thus, the intrinsic evidence indicates that when one device “associates with” another, the devices associate through their communicatively coupled applications. Accordingly, the Court finds that a person of ordinary skill in the art would understand “associating with” to mean “communicating with.”

Turning to the parties’ constructions, the Court finds that “associated with” has more than one ordinary meaning in the context of the intrinsic evidence. Plaintiff does not dispute this fact. Therefore, giving the term its plain and ordinary meaning would not resolve the parties’ dispute over what it means for one device to associate with another device in the context of the patents. *See, e.g., O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008)

(“A determination that a claim term ‘needs no construction’ or has the ‘plain and ordinary meaning’ may be inadequate when a term has more than one ‘ordinary’ meaning or when reliance on a term’s ‘ordinary’ meaning does not resolve the parties’ dispute.”).

Plaintiff identifies several examples in which the Asserted Patents refer to one thing (*e.g.*, information or data) that is “associated with” another thing/person (*e.g.*, a user or device). Docket No. 99 at 10–11. Plaintiff agrees that these examples show that the term takes on different meanings within the Asserted Patents. For example, Plaintiff argues that “[t]he specifications describe information as ‘associated with a user’ to mean information related to a user in some way and describe a hardware address as ‘associated with the networked device’ to mean a hardware address used to identify or signify a networked device.” *Id.* However, neither of these meanings of “associate” make sense when applied to the disputed phrases. For example, substituting “relating” for “associating” in claim 11 of the ’668 Patent makes performing the step unclear. Specifically, the step would become “automatically [relating], by the client device, [to] the networked device through a sandboxed application of the client device communicatively coupled to the sandbox-reachable service based on the identification data.” Accordingly, the Court rejects Plaintiff’s proposal of plain and ordinary meaning.

However, the Court agrees that Defendant’s construction improperly adds a requirement that the associated networked and mobile devices must have a two-way exchange of information. A “two way exchange of information” is not the plain and ordinary meaning of “associate” in the context of the intrinsic evidence. Instead, the claim language itself recites the required communication. For example, claim 1 of the ’668 Patent recites a client device configured to “*automatically associate* with the networked device through a sandboxed application of the client device communicatively coupled to the sandbox-reachable service based on the identification

data,” as well as “*automatically establish a communication session* between the sandboxed application and the sandbox-reachable service through at least one of a cross-site scripting technique, an appended header, a same origin policy exception, and an other mode of bypassing a number of access controls of the security sandbox.” ’668 Patent at claim 1 (emphasis added). To the extent that Defendant contends that “associate” requires a “two way exchange of information,” the Court rejects this argument. Finally, in reaching its conclusion, the Court has considered the extrinsic evidence submitted by the parties, and given it its proper weight in light of the intrinsic evidence.

c) Court’s Construction

The Court construes the term the phrase **“associate the television with the mobile device”** to mean **“enable the television to communicate with the mobile device,”** and the phrase **“mobile device capable of being associated with the television”** to mean **“mobile device capable of communicating with the television.”** The Court further construes the phrase **“client device configured to . . . associate with the networked device”** to mean **“client device configured to . . . communicate with the networked device,”** and the phrase **“associating, by the client device, with the networked device”** to mean **“communicating, by the client, with the networked device.”**

3. “targeted data”

<u>Disputed Term</u>	<u>Plaintiff’s Proposal</u>	<u>Defendant’s Proposal</u>
“targeted data”	“content recommendation, advertisement, product recommendation, and/or other information related to primary data”	“information related to primary data and intended to be communicated to a user, such as a content recommendation, advertisement, or product recommendation”

a) The Parties' Positions

The parties do not dispute that the targeted data may include a content recommendation, an advertisement, or a product recommendation. The parties dispute whether the “targeted data” must be information that is intended to be communicated to a user, as Defendant proposes. Plaintiff argues that Defendant’s construction includes a statement of intended use that provides less clarity regarding the scope of the claimed invention. Docket No. 99 at 19. Plaintiff also argues that Defendant’s construction excludes preferred embodiments where the targeted data is not sent or intended to be sent to a user. *Id.* (citing ’668 Patent at 12:10–12, Figure 2). According to Plaintiff, targeted data is selected by a relevancy-matching process, and only after selection by the relevancy-matching server do the Asserted Patents contemplate communicating or rendering the targeted data to a user. Docket No. 99 at 19 (citing ’668 Patent at 12:17–20, 12:1–4). Plaintiff further argues that the Asserted Patents describe embodiments in which targeted data sits in storage devices, and is only communicated to a user after selection and in some instances only after a triggering event. Docket No. 99 at 19 (citing ’668 Patent at 13:9–16, 22:18–24).

Defendant responds that its construction specifies that targeted data is information that is intended to be communicated to a user. Docket No. 104 at 23. Defendant argues that its construction is supported by the specification and conforms to the central purpose of the invention. *Id.* (citing ’668 Patent at 1:40–44, 2:15–18, 5:48–53, 3:39–45, 21:38–41, 12:2–4, 13:11–14, 21:65–22:1, 52:32–35, 54:25–28, 56:29–32, Figures 8–9). Defendant concedes that not every claim requires that targeted data is actually communicated or rendered to a user, but argues that targeted data must at least be intended to be communicated to a user. Docket No. 104 at 24. Defendant further argues that there are many different types of data related to primary data that would never be targeted to a user (*e.g.*, unintelligible fingerprint data). *Id.* According to Defendant, Plaintiff’s construction is impermissibly broad because it essentially reads the word

“targeted” out of the claims. *Id.*

Plaintiff replies that rendering of “targeted data” (*e.g.*, presenting, transmitting in a consumable format, delivering) is claimed in dependent claims of the Asserted Patents. Docket No. 109 at 7 (citing ’668 at Claims 16; 7:49–50). Plaintiff argues that this shows “targeted data” does not indicate whether the data is rendered (*e.g.*, delivered) to a user. Docket No. 109 at 7. According to Plaintiff, the Asserted Patents make clear “communicating to a user” is separate from “targeted data” itself. *Id.* (citing ’668 Patent at 12:10–12; Figures 2). Plaintiff contends that targeted data is communicated or rendered to a user only after selection by the relevancy-matching server or another triggering event. Docket No. 109 at 7 (citing ’668 Patent at 12:17–20, 12:1–4, 13:9–16, 22:18–24).

For the following reasons, the Court finds that the term **“targeted data”** should be construed to mean **“content recommendation, advertisement, product recommendation, and/or other information matching or related to primary data.”**

b) Analysis

The term “targeted data” appears in claims 1, 6, 11, 16, 21, and 26 of the ’668 Patent; and claims 1, 3, 6, 10, 11, 14, 18, 19, and 21 of the ’356 Patent. The Court finds that the term is used consistently in the claims and is intended to have the same general meaning in each claim. The Court further finds that the term “targeted data” is closely tied to the relevancy-matching server. Claim 1 of the ’668 Patent recites “a relevancy-matching server configured to match a targeted data with a primary data based on a relevancy factor associated with the user.” *See also* ’668 Patent at 2:28–30 (“The relevancy-matching server may be configured to match a targeted data with the primary data based on a relevancy factor associated with the user.”). The specification further states that Figure 8 illustrates “a block diagram depicting the relevancy-matching server

200 communicating the targeted data 800 to the client device 100 and the networked device 102, according to one embodiment.” ’668 Patent at 21:38–41. This is consistent with dependent claim 6 of the ’668 Patent, which recites that the relevancy-matching server “is configured to render the targeted data to the user through at least one of the networked device and the sandboxed application of the client device.” Thus, the intrinsic evidence draws a distinction between targeted data that is matched to primary data, and targeted data that is later rendered to the user after it is matched to primary data.

Moreover, the specification states that “the targeted data 800 may comprise a content recommendation, an advertisement, a product recommendation, and/or an other information related to the primary data 500.” *Id.* at 21:49–52. The specification adds that “[t]he targeted data 800 *may comprise the matching item and/or the related item* in the storage 202.” *Id.* at 21:52–55 (emphasis added). This is consistent with the parties’ agreement for this term. Accordingly, the Court construes “targeted data” to mean “content recommendation, advertisement, product recommendation, and/or other information matching or related to primary data.”

Regarding Defendant’s “intended to be communicated” proposal, the Court rejects the proposal because it confuses the claim language. The specification indicates that storage 202 acts as a repository of targeted data. ’668 Patent at 12:10–12 (“The storage 200 may be a volatile memory, a non-volatile memory, a disk, and/or an other repository of the targeted data 800.”). The specification further states that “[t]he relevancy-matching server 200 may match the targeted data 800 with the primary data 500 by searching the storage 200 for a matching item and/or a related item based on the relevancy factor.” *Id.* at 12:17–20. Thus, the specification indicates that the “targeted data” is stored and then selected based on the relevancy factor, and not on intended use.

Indeed, the intrinsic evidence indicates that it is only after the targeted data is selected that

it may be communicated or rendered to the user. For example, dependent claim 6 of the '668 Patent recites “wherein the relevancy-matching server is configured to render the targeted data to the user through at least one of the networked device and the sandboxed application of the client device.” Similarly, the specification states that Figure 8 “is a block diagram depicting the relevancy-matching server 200 communicating the targeted data 800 to the client device 100 and the networked device 102, according to one embodiment.” '668 Patent at 21:38–41. Thus, the intrinsic evidence indicates that “communicating to a user” is separate from the recited “targeted data” itself. Moreover, it is not just “any data,” but instead is the data selected based on the relevancy factor associated with the user.

Defendant contends that the “targeted data must at least be intended to be communicated to a user; otherwise, nothing about it is targeted.” Docket No. 104 at 24. The Court disagrees. As discussed, the claims recite that the relevancy-matching server is “configured to match a targeted data with a primary data based on a relevancy factor associated with the user.” '668 Patent at Claim 1. Therefore, the selection of the targeted data is based on a relevancy factor associated with the user, and not necessarily on whether it is intended to be communicated. The Court finds Defendant’s “intended to be communicated” potentially confusing because it would require determining the “intended use” of the data.

c) Court’s Construction

The Court construes the term **“targeted data”** to mean **“content recommendation, advertisement, product recommendation, and/or other information matching or related to primary data.”**

4. “content identification server” and “relevancy-matching server”

<u>Disputed Term</u>	<u>Plaintiff’s Proposal</u>	<u>Defendant’s Proposal</u>
“a content identification server to . . . ”	<p>Function(s): “process the fingerprint data from the television”</p> <p>“communicate the primary data from the fingerprint data to any of a number of devices with an access to an identification data of at least one of the television and an automatic content identification service of the television”</p> <p>“process the fingerprint data from at least one of the television and the mobile device”</p> <p>“communicate the primary data from the fingerprint data to any of a number of devices with an access to an identification data of at least one of the television and an automatic content identification service of the television”</p> <p>Corresponding Structure(s), Act(s), or Material(s): U.S. Patent No. 9,386,356 at Figs. 10–11 (item 1006), 12, 13–26 (items 1006, 1500, 1700, 1900); cols. 7:60–9:64, 12:21–13:66, 19:28–21:37, 22:53–26:53, 27:12–29:38, 30:3–32:51, 33:25–41, 34:33–51, 35:64–38:64, 42:32–51:59, and equivalents thereof.</p>	<p>Function(s): ’356 (claim 1): “process the fingerprint data from the television”</p> <p>’356 (claims 13, 18): “process the fingerprint data from at least one of the television and the mobile device”</p> <p>’356 (claims 1, 13, 18): “communicate the primary data from the fingerprint data to any of a number of devices with an access to an identification data of at least one of the television and an automatic content identification service of the television”</p> <p>Corresponding Structure that performs the Claimed Function(s): None. Indefinite for failure to disclose sufficient corresponding algorithm(s) and/or other structure for performing the claimed function(s).</p>
a relevancy-matching server a relevancy matching server configured to the relevancy-matching server is configured to	<p>Claimed Function(s): “match a targeted data with a primary data based on a relevancy factor associated with the user”</p> <p>“match the targeted data with the primary data in a manner such that the relevancy- matching server is configured to search a storage for at least one of a matching item and a related item based on the relevancy factor comprising at least one of a</p>	<p>Claimed Function(s): ’668 (claims 1, 6): “match a targeted data with a primary data based on a relevancy factor associated with the user”</p> <p>’668 (claims 1, 6, 21, 26) &’356 (claim 14): “search a storage for at least one of a matching item and a related item based on the relevancy factor comprising at least one of a category of the primary data, a</p>

<p>a relevancy-matching server comprising a</p>	<p>category of the primary data, a behavioral history of the user, a category of the sandboxed application, and an other information associated with the user”</p> <p>render the targeted data to the user through at least one of the networked device and the sandboxed application of the client device</p> <p>“match primary data generated from the fingerprint data with targeted data, based on a relevancy factor”</p> <p>“search a storage for the targeted data”</p> <p>Corresponding Structure(s), Act(s), or Material(s): U.S. Patent No. 9,026,668 at Figs. 2 (item 200), 5–9 (item 200); cols. 11:53–12:20, 13:9–39, 18:30–19:56, 21:12–22:3, 22:41–52, 30:48–61, 31:10–28, 31:49–58, 50:50–51:3, and equivalents thereof.</p> <p>U.S. Patent No. 9,386,356 at Figs. 2 (item 200), 5–9 (item 200); cols. 7:49–11:38, 12:46–14:31, 15:24–36, 19:21–30, 19:62–20:3, 20:19–21:8, 22:3–9, 22:29–36, 22:54–61, 23:32–44, 27:64–28:34, 29:39–53, 31:42–33:6, 35:28–41, 38:65–39:11, 41:50–42:5, 43:53–67, 44:44–45:18, 45:36–46:7, 46:43–48:63, 49:65–50:42, 51:5–19, 51:39–59, and equivalents thereof.</p>	<p>behavioral history of the user, a category of the sandboxed application, and an other information associated with the user”</p> <p>’668 (claims 11, 16): “match the targeted data with the primary in a manner such that the relevancy-matching server is configured to search a storage for at least one of a item based on the relevancy factor comprising at least one of a category of the primary data, a behavioral history of the user, a category of the sandboxed application, and an other information associated with the user”</p> <p>’668 (claims 6, 16, 26): “render the targeted data to the user through at least one of the networked device and the sandboxed application of the client device”</p> <p>’356 (claim 1): “match primary data generated from the fingerprint data with targeted data, based on a relevancy factor”</p> <p><u>Corresponding Structure that performs the Claimed Function(s):</u> None. Indefinite for failure to disclose sufficient corresponding algorithm(s) and/or other structure for performing the claimed function(s).</p>
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a) The Parties’ Positions

The parties dispute whether the “server” terms are subject to § 112 ¶ 6. Defendant contends that the terms are means-plus-function terms governed by § 112(6) because they recite insufficient structure to perform their recited functions. Defendant further contends that the terms are indefinite because the specification does not recite algorithms that perform the recited functions.

Specifically, Defendant contends that the “relevancy-matching server” is “configured to” perform three functions and the “content identification server” is required “to” perform two functions in the asserted claims. Docket No. 104 at 25. Defendant argues that none of the five recited functions are standard to a traditional server, and the limitations do not recite sufficient structure for performing them. *Id.* at 25 (citing Docket No. 104-1 at 9, 32-33). According to Defendant, the claimed “relevancy-matching server” and “content identification server” do not “live up to their inventor-given names absent sufficient structure that allows the claimed servers to perform the claimed functions.” Docket No. 104 at 26.

Defendant also argues that Plaintiff does not address whether the “server configured to” terms recite sufficient structure for performing the recited functions. *Id.* Defendant contends that Plaintiff’s assertion that “server” necessarily recites sufficient structure does not withstand scrutiny. *Id.* Defendant argues that the recited function is outside the set of standard functions for a standard server, and that § 112(6) applies because there is insufficient recited structure for performing the claimed function without additional programming. *Id.*

Defendant also argues that Plaintiff’s expert does not contend that “relevancy-matching server” and “content identification server” are well-known industry terms. *Id.* at 27. Defendant also contends that the portions of the specification cited by Plaintiff do not provide structure sufficient to perform the claimed functions. *Id.* Defendant further argues that “[u]nder *Williamson’s* second alternative test for means-plus function claiming, the relevant inquiry for these terms is whether these ‘server configured to’ / ‘server to’ terms recite functions without also reciting sufficient structure for performing those functions.” *Id.* at 28.

Plaintiff responds that the “content identification server” and “relevancy-matching server” elements are not means-plus-function limitations because a person of ordinary skill in the art

would understand these terms to refer to sufficiently-definite structures. Docket No. 99 at 24. Plaintiff argues that Courts recognize that the term “server” recites sufficient structure. *Id.* Plaintiff contends that “content identification server” and “relevancy-matching server” recite at least as much structure as “server,” and are thus not means-plus-function limitations. *Id.* Plaintiff further argues that the Asserted Patents confirm the terms relevancy-matching server and content identification server recite sufficient structure. *Id.* (citing ’668 Patent at Abstract; 2:15–45, 3:29–59, 11:53–12:20, 13:9–39, 18:31–39, 19:4–12, 19:28–56, 21:12–18, 21:38–45, 21:65–22:3, 22:51–52, 30:48–61, 31:10–28, 31:49–58, 50:45–51:3; Figures 2, 5–9, Claims 1, 6, 11, 16, 21–30 (relevancy-matching server); 7:61–8:5, 12:62–13:8, 22:53–25:60, 26:19–28:44, 29:9–31:58, 32:32–48, 33:40–58, 35:4–38:6, 41:41–51:3; Figures 10–26, Claims 8, 18, 28 (content identification); Docket No. 99-13 at 15, 17). Plaintiff also contends that extrinsic evidence confirms server is an understood term connoting structure consistent with the Asserted Patents. Docket No. 99 at 25 (citing Docket No. 99-13 at 16; Docket No. 99-11 (the Dictionary of Computer and Internet Terms (2013)), Docket No. 99-12 (Oxford Dictionary of Computing (6th ed., 2008))).

In the alternative, Plaintiff argues that if § 112, ¶ 6 is found to apply to the content identification server or relevancy-matching server elements, the specifications recite substantial structure for each of these terms corresponding to their claimed functions. Docket No. 99 at 26. Plaintiff also argues that the steps described in the identified portions of the Asserted Patents can constitute specific algorithms that could be implemented on a general-purpose computer if required. *Id.*

Finally, Plaintiff argues that Defendant’s “alternative test” conflates the threshold question of whether a term is a mean-plus-function term with the second question of identifying corresponding structure only after a term is found to be a means-plus-function term. Docket No.

109 at 7. Plaintiff contends that the second step of identifying corresponding structure only applies if the disputed terms are first found to be means-plus-function terms. *Id.* at 7–8. According to Plaintiff, Defendant’s argument that each recited function “is outside the set of standard functions for a standard, ‘out-of-the-box’ server” is the wrong analysis. *Id.* at 9. Plaintiff argues that the threshold question is whether one of skill in the art would recognize that “content identification server” recites sufficient structure. Plaintiff contends that both experts agree a server connotes structure. *Id.* (citing Docket No. 99-13 at 15-18; Docket No. 104-1 at 10-11; Docket No. 109-1 at 5-11).

For the following reasons, the Court finds that the terms **“content identification server”** and **“relevancy-matching server”** are not subject to subject to § 112 ¶ 6, and should be given their plain and ordinary meaning.

b) Analysis

The term “content identification server” appears in claims 1, 13, and 18 of the ’356 Patent. The Court finds that the term is used consistently in the claims and is intended to have the same general meaning in each claim. The term “relevancy-matching server” appears in claims 1, 6, 11, 16, 21, and 26 of the ’668 Patent, and claims 1 and 14 of the ’356 Patent. The Court finds that the term is used consistently in the claims and is intended to have the same general meaning in each claim. The Court further finds that the terms are not subject to § 112 ¶ 6.

“It is well settled that ‘[a] claim limitation that actually uses the word ‘means’ invokes a rebuttable presumption that § 112, [¶] 6 applies.’ ” *Apex Inc. v. Raritan Comput., Inc.*, 325 F.3d 1364, 1371 (Fed. Cir. 2003) (quotation omitted). It is also equally understood that “a claim term that does not use ‘means’ will trigger the rebuttable presumption that § 112, [¶] 6 does not apply.” *Id.* (quotation omitted). The presumption against the application of § 112, ¶ 6 may be overcome

if a party can “demonstrate[] that the claim term fails to ‘recite sufficiently definite structure’ or else recites ‘function without reciting sufficient structure for performing that function.’ ” *Williamson*, 792 F.3d 1339 (quoting *Watts v. XL Sys., Inc.*, 232 F.3d 877, 880 (Fed. Cir. 2000)). “In undertaking this analysis, we ask if the claim language, read in light of the specification, recites sufficiently definite structure to avoid § 112, ¶ 6.” *Robert Bosch, LLC v. Snap-On Inc.*, 769 F.3d 1094, 1099 (Fed. Cir. 2014) (citing *Inventio AG v. Thyssenkrupp Elevator Ams. Corp.*, 649 F.3d 1350, 1357 (Fed. Cir. 2011)).

None of the claims recite the word “means.” Therefore, there is a rebuttable presumption that § 112, ¶ 6 does not apply. Here, Defendant has failed to rebut the presumption because “the words of the claim are understood by persons of ordinary skill in the art to have sufficiently definite meaning as the name for structure.” *Williamson*, 792 F.3d at 1348. Specifically, the claims themselves connote that the “relevancy-matching server” is structural by describing how the “relevancy-matching server” operates within the claimed invention to achieve its objectives. For instance, claim 1 of the ’668 Patent recites that the relevancy-matching server is configured to match a targeted data with a primary data based on a relevancy factor associated with the user. Claim 1 further recites that the relevancy-matching server is configured to match the targeted data with the primary data in a manner such that the relevancy-matching server is configured to search a storage for at least one of a matching item and a related item based on the relevancy factor comprising at least one of a category of the primary data, a behavioral history of the user, a category of the sandboxed application, and an other information associated with the user. Likewise, claim 6 of the ’668 Patent recites that the relevancy-matching server is configured to render the targeted data to the user through at least one of the networked device and the sandboxed application of the client device.

Moreover, claim 10 of the '356 Patent recites that the relevancy-matching server includes a processor, a memory communicatively coupled with the processor, and instructions stored in the memory and executed using the processor. Claim 10 further recites that the relevancy-matching server is configured to match primary data generated using a fingerprint data with targeted data, based on a relevancy factor comprising at least one of a category of the primary data, a behavioral history of a user, a category of a sandboxed application, and another information associated with the user. The claim also recites that the relevancy-matching server is configured to search a storage for the targeted data, and cause a rendering of the targeted data to the user through the sandboxed application of the mobile device.

Therefore, the claims themselves connote sufficiently definite structure by describing how the “relevancy-matching server” operates within the claimed invention to achieve its objectives. *See, e.g., Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1319-21 (Fed. Cir. 2004) (finding “circuit [for performing a function]” to be sufficiently definite structure because the claim recited the “objectives and operations” of the circuit); *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1295, 1301 (Fed. Cir. 2014) (finding “heuristic [for performing a function]” to be sufficiently definite structure because the patent described the operation and objectives of the heuristic); *Collaborative Agreements, LLC v. Adobe Sys.*, No. 15-cv-03853-EMC, 2015 U.S. Dist. LEXIS 161809, at *11-*24 (N.D. Cal. Dec. 2, 2015) (determining “code segment [for performing a function]” to be sufficiently definite structure because the claim described the operation of the code segment); *Finjan, Inc. v. Proofpoint, Inc.*, No. 13-cv-05808-HSG, 2015 U.S. Dist. LEXIS 162504, at *31-*32 (N.D. Cal. Dec. 3, 2015) (determining “processor [for performing a function]” to be sufficiently definite structure because the claim described how the processor functions with the other claim components).

Similarly, the claims connote that the “content identification server” is structural by describing how the “content identification server” operates within the claimed invention to achieve its objectives. For instance, claim 1 of the ’356 Patent recites that the content identification server is configured to process the fingerprint data from the television, and communicate the primary data from the fingerprint data to any of a number of devices with an access to an identification data of at least one of the television and an automatic content identification service of the television. Therefore, the claims themselves connote sufficiently definite structure by describing how the “content identification server” operates within the claimed invention to achieve its objectives.

In addition to the claims, the specification states that the relevancy-matching server may be “a computer hardware system dedicated to matching, using a processor and memory, a targeted data 800 with the primary data 500 based on a relevancy factor associated with the user 902,” and that the content identification server may be a “computer hardware system dedicated to identifying a content of the media data 1004 and/or the other media data . . . using a processor and a memory.” ’668 Patent at 11:53–12:4, 12:62–66. The specification further states that the relevancy-matching and the content identification servers may comprise “a computer, a plurality (e.g., at least two) of computers, and/or a peer-to-peer network of computers.” *Id.* at 11:63–66, 24:55–57.

The specification also states that the relevancy-matching server is connected to the client device, the networked device, and/or storage, and that storage may exist within the relevancy-matching server. *Id.* at 11:45–12:4, 12:12–13, Figure 2. Likewise, the specification states that the “content identification server” is connected to the client device and the networked device. *Id.* at 22:57–60. Therefore, the intrinsic evidence describes the structural nature of the servers, delineates the components that the servers are connected to, describes how the server interacts with those

components, and describes the objective and operation of the servers. *Inventio AG v. Thyssenkrupp Elevator Ams. Corp.*, 649 F.3d 1350, 1359 (Fed. Cir. 2011) (“[T]his is not a case where a claim nakedly recites a ‘device’ and the written description fails to place clear structural limitations on the ‘device.’ ”)

Finally, the extrinsic evidence indicates that “server” is an understood term connoting structure. For example, the Dictionary of Computer and Internet Terms defines server as “a computer that provides services to another computer (called the client).” Docket No. 99-11 at 7. The Oxford Dictionary of Computing defines server as “a system of a network that provides a service to other systems connected to the network.” Docket No. 99-12 at 5. Accordingly, a person of ordinary skill in the art would understand that “the claim language, read in light of the specification, recites sufficiently definite structure to avoid § 112, ¶ 6.” *Robert Bosch, LLC v. Snap-On Inc.*, 769 F.3d 1094, 1099 (Fed. Cir. 2014). Although the presumption against § 112 ¶ 6 is no longer “strong,” it is still a presumption that Defendant must affirmatively overcome. Here, Defendant has failed to rebut the presumption that § 112, ¶ 6 does not apply.

Defendant argues that *Williamson* created a “second alternative test for means-plus function claiming.” Docket No. 104 at 28. The Court agrees that the test for determining whether § 112, ¶ 6 applies has been stated and restated in a number of ways, but disagrees that *Williamson* created a **new** “second alternative test.” The Court in *Williamson* clearly stated that “[t]he standard is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015). In other words, “[t]he correct inquiry, when ‘means’ is absent from a limitation, is whether the limitation, read in light of the remaining claim language, specification, prosecution history, and relevant extrinsic evidence, has sufficiently definite

structure to a person of ordinary skill in the art.” *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298 (Fed. Cir. 2014). As indicated above, the intrinsic and extrinsic evidence indicates that the disputed “content identification server” and “relevancy-matching server” connote sufficiently definite structure to a person of ordinary skill in the art, and are not subject to subject to § 112 ¶ 6.

This is further confirmed by the fact that Defendant does not contend that the “pairing server” is subject to subject to § 112 ¶ 6. Instead, Defendant originally argued that the “pairing server” should be construed to mean a “server that enables a communication session between two other devices.” Docket No. 104 at 17. Defendant has since agreed to a construction for “pairing server,” but still maintains that the other “server” terms are subject to § 112 ¶ 6, and are indefinite for failing to disclose sufficient structure. Defendant has not provided a persuasive reason why “pairing server” connotes sufficient structure, but “content identification server” and “relevancy-matching server” do not. The simple answer is that all of the “server” terms when “read in light of the remaining claim language, specification, prosecution history, and relevant extrinsic evidence, ha[ve] sufficiently definite structure to a person of ordinary skill in the art.” *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298 (Fed. Cir. 2014).

Indeed, the specification explicitly states that “[t]he pairing server 300 may also be the relevancy-matching server 200 and/or the intermediary server 700.” ’668 Patent at 13:38–39. Similarly, the specification states that “[t]he content identification server 1006 may also be the relevancy-matching server 200, the pairing server 300, and/or the intermediary server 700.” *Id.* at 24:57–60. Finally, in reaching its conclusion, the Court has considered the extrinsic evidence submitted by the parties, and given it its proper weight in light of the intrinsic evidence.

c) Court's Construction

The terms “**content identification server**” and “**relevancy-matching server**” are not subject to subject to § 112 ¶ 6, and will be given their plain and ordinary meaning.

5. “client device configured to” and “network device configured to”

<u>Disputed Term</u>	<u>Plaintiff's Proposal</u>	<u>Defendant's Proposal</u>
<p>“a client device configured to:”</p> <p>“the client device configured to”</p>	<p><u>Function(s):</u></p> <p>“automatically process an identification data of at least one of the networked device and the sandbox-reachable service of the networked device from the discovery module”</p> <p>“automatically associate with the networked device through a sandboxed application of the client device communicatively coupled to the sandbox-reachable service based on the identification data”</p> <p>“process an embedded object from the relevancy-matching server through the sandboxed application”</p> <p>“gather the primary data through at least one of the embedded object and the sandboxed application”</p> <p>“communicate the primary data to the relevancy- matching server through the embedded object”</p> <p>“constrain an executable environment in a security sandbox”</p> <p>“execute the sandboxed application in the executable environment”</p> <p>“automatically establish a communication session between the sandboxed application and the sandbox-reachable service through at least one of a cross-site scripting technique, an</p>	<p><u>Function(s):</u></p> <p>'668 (claims 1, 21): “automatically process an identification data of at least one of the networked device and the sandbox-reachable service of the networked device from the discovery module”</p> <p>'668 (claims 1, 21): “automatically associate with the networked device through a sandboxed application of the client device communicatively coupled to the sandbox- reachable service based on the identification data”</p> <p>'668 (claims 1, 21): “process an embedded object from the relevancy-matching server through the sandboxed application”</p> <p>'668 (claims 1, 21): “gather the primary data through at least one of the embedded object and the sandboxed application”</p> <p>'668 (claims 1, 21): “communicate the primary data to the relevancy-matching server through the embedded object”</p> <p>'668 (claims 1, 21): “constrain an executable environment in a security sandbox”</p>

	<p>appended header, a same origin policy exception, and an other mode of bypassing a number of access controls of the security sandbox”</p> <p><u>Corresponding Structure(s), Act(s), or Material(s):</u> U.S. Patent No. 9,026,668 at Figs. 1–11, 13–16 (item 100); cols. 5:48–7:48, 8:11–9:42, 9:65–10:45, 11:3–52, 12:21–61, 13:9–66, 15:22–50, 16:1–38, 16:52–59, 17:39–23:2, 23:12–24:42, 32:14–31, 32:49–56, 33:13–26, 33:40–58, 37:1–16, 37:42–59, 38:21–44, 38:62–39:14, 39:38–46, 39:66–40:50, 50:45–51:3, and equivalents thereof.</p>	<p>’668 (claims 1, 21): “execute the sandboxed application in the executable environment”</p> <p>’668 (claims 1, 21): “automatically establish a communication session between the sandboxed application and the sandbox reachable service through at least one of a cross-site scripting technique, an appended header, a same origin policy exception, and an other mode of bypassing a number of access controls the security sandbox”</p> <p><u>Corresponding Structure that performs the Claimed Function(s):</u> None. Indefinite for failure to disclose sufficient corresponding algorithm(s) and/or other structure for performing the claimed function(s).</p>
<p>“a networked device configured to:”</p> <p>“the networked device configured”</p>	<p><u>Claimed Function(s):</u> “automatically announce a sandbox-reachable service of the networked device to a discovery module”</p> <p>“automatically announce the primary data along with the sandbox-reachable service of the networked device to the discovery module”</p> <p><u>Corresponding Structure(s), Act(s), or Material(s):</u> U.S. Patent No. 9,026,668 at Figs. 1–8 (item 102), 10 (item102), 11 (items 102, 1106A, 1106B), 13 (item 102), 14(items 102, 1400A, 1400B), 15–19 (item 102), 22 (item102), 23 (items, 102, 1400A, 1400B), 26 (item 2600); cols. 1:48–67, 6:16–9:64, 11:3–11, 11:45–67, 12:21–13:67, 14:9–23, 14:32–51, 14:66–15:67, 16:18–23, 19:13–37, 20:1–59, 21:1–64, 22:10–16, 22:62–23:29, 23:58–24:22, 24:61–25:12, 26:50–27:3, 32:58–66, 50:45–51:3, and equivalents thereof</p>	<p><u>Claimed Function(s):</u> ’668 (claims 1, 9, 21, 29): “automatically announce a sandbox-reachable service of the networked device to a discovery module”</p> <p>’668 (claims 9, 19, 29): “automatically announce the primary data along with the sandbox-reachable service of the networked device to the discovery module”</p> <p><u>Corresponding Structure that performs the Claimed Function(s):</u> None. Indefinite for failure to disclose sufficient corresponding algorithm(s) and/or other structure for performing the claimed function(s).</p>

a) The Parties' Positions

The parties dispute whether the “device” terms are subject to § 112 ¶ 6. Defendant contends that the terms are means-plus-function terms governed by § 112(6) because they recite insufficient structure to perform their recited functions. Defendant further contends that the terms are indefinite because the specification does not recite algorithms that perform the recited functions. Specifically, Defendant argues that the limitations are defined in the claims by what the “device” does and not by what the “device” is. Docket No. 104 at 29. Defendant contends that the claimed “devices” each represent a black box for performing the recited functions. *Id.* Defendant further argues that portions of the specification provide some structure for “client device” and “networked device,” but do not denote sufficiently definite structure for performing all of the recited functions. *Id.* (citing ’668 Patent at 5:66–6:2; 6:16–22).

Defendant also argues that “network” and “client” before the term “device” do not provide any “structural significance” for performing the recited functions. Docket No. 104 at 30. According to Defendant, neither these prefixes nor the written disclosure describe that interaction “in a way that might inform the structural character of the limitation-in-question or otherwise impart structure” to the “client device” or “network device” of the claims. *Id.* (citing *Williamson*, 792 F.3d at 1351).

Regarding the term “client device,” Plaintiff responds that the “client device” element is not a means-plus-function element because a person of ordinary skill in the art would understand the term to have sufficiently-definite structure. Docket. No. 99 at 21. Plaintiff contends that the Asserted Patents describe the client device as hardware, and further describes what the client device contains. *Id.* at 22 (citing ’668 Patent at 5:66–6:6, 9:65–67). Plaintiff further argues that the Asserted Patents describe what the client device is connected to, and that the client device may use executable code, may be on a mobile phone on a cellular network, and may have a Media

Access Control (MAC) address. (Docket No. 99 at 22) (citing '668 Patent at 5:54–6:15, 11:3–11, 11:45–12:4, 13:23–39, 19:28–56; 25:50–26:34, 18:40–57, 19:4–12, 21:5–11, 21:31–37, 23:30–24:22, 39:2–7, 40:2–5, 40:45–48; Figures 1– 3, 7, 11).

Plaintiff also contends that the Asserted Patents provide structure when describing how the client device performs functions. Docket No. 99 at 23 (citing '668 Patent at 6:32–9:64). Plaintiff also argues that the Asserted Patents describe the client device processing an embedded object, and further describe an executable environment of the client device as a virtual machine, a jail, or a scripting language interpreter that constrains applications. Docket No. 99 at 23 (citing '668 Patent at 12:21–61, 9:65–10:58). Finally, Plaintiff contends that the extrinsic evidence further confirms “client device” connotes structure. Docket No. 99 at 23 (citing Docket No. 99-11 (Dictionary of Computer and Internet Terms (11th ed., 2013)); Docket No. 99-13 at 14).

In the alternative, Plaintiff argues that if § 112, ¶ 6 is found to apply to the client device element, the specifications recite substantial structure for each of these terms corresponding to their claimed functions. Docket No. 99 at 23. Plaintiff also argues that the steps described in the identified portions of the Asserted Patents constitute specific algorithms that could be implemented on a general-purpose computer if required. *Id.* at 24.

Regarding “networked device,” Plaintiff responds that the “networked device” element is not a means-plus-function element because a person of ordinary skill in the art would understand the term to have sufficiently-definite structure. *Id.* at 26. Plaintiff contends that the Asserted Patents describe the networked device as hardware, and further describes the networked device as performing a number of sandbox-reachable services using a processor and a memory. *Id.* at 27. (citing '668 Patent at 6:16–22, 16:24–30). Plaintiff further argues that the Asserted Patents describe what the networked device is connected to and that the networked device may render

media data, have a hardware address (e.g., a MAC address), have a global unique identifier (GUID), and communicate via a local area network (LAN). Docket No. 99 at 27 (citing '668 Patent at 11:3–11, 11:45–12:4, 13:23–39, 19:28–56; 25:50–26:34.; Ex. A at 7:49–51, 13:51–67, 20:41–59, 21:1–4; Figures 1–3, 7, 11; Docket No. 99-13 at 18–20).

Plaintiff further argues that the Asserted Patents provide structure when describing how the networked device performs its functions. Docket No. 99 at 27 (citing '668 Patent at 6:32–7:48). Finally, Plaintiff contends that the extrinsic evidence further confirms client device connotes structure. Docket No. 99 at 23 (citing Docket No. 99-11 (Dictionary of Computer and Internet Terms (11th ed., 2013))); Docket No. 99-13 at 19-20).

In the alternative, Plaintiff argues that if § 112, ¶ 6 is found to apply to the networked device element, the Asserted Patents recite substantial structure for each of these terms corresponding to their claimed functions. Docket No. 99 at 27-28. Plaintiff also argues that the steps described in the identified portions of the Asserted Patents constitute specific algorithms that could be implemented on a general-purpose computer if required. *Id.* at 28.

For the following reasons, the Court finds that the term **“client device”** should be construed to mean **“a computer, a smartphone, and/or another hardware that may be configured to initiate contact with a server to make use of a resource,”** and that the term **“networked device”** should be construed to mean **“a geolocation device, a hygrometer, a thermometer, a barometer, an anemometer, a television, an audio device, a game console, a set top box, an other computer, and/or an other hardware connected by a number of communications channels that allow sharing of a number of resources and/or a number of information.”**

b) Analysis

The term “client device” appears in claims 1 and 21 of the '668 Patent. The Court finds

that the term is used consistently in the claims and is intended to have the same general meaning in each claim. The term “networked device” appears in claims 1, 9, 19, 21, and 29 of the ’668 Patent. The Court finds that the term is used consistently in the claims and is intended to have the same general meaning in each claim. The Court further finds that the terms are not subject to § 112 ¶ 6.

“It is well settled that ‘[a] claim limitation that actually uses the word ‘means’ invokes a rebuttable presumption that § 112, [¶] 6 applies.’” *Apex Inc. v. Raritan Comput., Inc.*, 325 F.3d 1364, 1371 (Fed. Cir. 2003) (quotation omitted). It is also equally understood that “a claim term that does not use ‘means’ will trigger the rebuttable presumption that § 112, [¶] 6 does not apply.” *Id.* (quotation omitted). The presumption against the application of § 112, ¶ 6 may be overcome if a party can “demonstrate[] that the claim term fails to ‘recite sufficiently definite structure’ or else recites ‘function without reciting sufficient structure for performing that function.’” *Williamson*, 792 F.3d 1339 (quoting *Watts v. XL Sys., Inc.*, 232 F.3d 877, 880 (Fed. Cir. 2000)). “In undertaking this analysis, we ask if the claim language, read in light of the specification, recites sufficiently definite structure to avoid § 112, ¶ 6.” *Robert Bosch, LLC v. Snap-On Inc.*, 769 F.3d 1094, 1099 (Fed. Cir. 2014) (citing *Inventio AG v. Thyssenkrupp Elevator Ams. Corp.*, 649 F.3d 1350, 1357 (Fed. Cir. 2011)).

None of the claims recite the word “means.” Therefore, there is a rebuttable presumption that § 112, ¶ 6 does not apply. Here, Defendant has failed to rebut the presumption. Although “[g]eneric terms such as ‘mechanism,’ ‘element,’ ‘device,’ and other nonce words that reflect nothing more than verbal constructs may be used in a claim in a manner that is tantamount to using the word ‘means,’ ” *Williamson* at 1350 (quoting *Abacus Software*, 462 F.3d at 1354), the Court finds that the claims of the ’668 Patent recite sufficiently definite structure given the context of

the limitations in which the claim terms are found. *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1299 (Fed. Cir. 2014) (“Even if a patentee elects to use a ‘generic’ claim term, such as ‘a nonce word or a verbal construct,’ properly construing that term (in view of the specification, prosecution history, etc.) may still provide sufficient structure such that the presumption against means-plus-function claiming remains intact.”). Moreover, a modifier added to a nonce term (e.g., module, element, device) can prevent the term from being construed as a means-plus-function element because the modifier “further narrows the scope of those structures covered by the claim and makes the term more definite.” *Personalized Media Commc'ns, LLC v. Int'l Trade Comm'n*, 161 F.3d 696, 705 (Fed. Cir. 1998).

Regarding the term “client device,” the claims themselves connote sufficiently definite structure by describing how the “client device” operates within the claimed invention to achieve its objectives. For instance, claim 1 of the '668 Patent recites that the client device is configured to “automatically process an identification data of at least one of the networked device and the sandbox-reachable service of the networked device from the discovery module, automatically associate with the networked device through a sandboxed application of the client device communicatively coupled to the sandbox-reachable service based on the identification data, process an embedded object from the relevancy-matching server through the sandboxed application, gather the primary data through at least one of the embedded object and the sandboxed application, and communicate the primary data to the relevancy-matching server through the embedded object.” Claim 1 further recites that the client device is further configured to “constrain an executable environment in a security sandbox, execute the sandboxed application in the executable environment, and automatically establish a communication session between the sandboxed application and the sandbox-reachable service through at least one of a cross-site

scripting technique, an appended header, a same origin policy exception, and an other mode of bypassing a number of access controls of the security sandbox.”

Therefore, the claims themselves connote sufficiently definite structure by describing how the “client device” operates within the claimed invention to achieve its objectives. *See, e.g., Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1319-21 (Fed. Cir. 2004) (finding “circuit [for performing a function]” to be sufficiently definite structure because the claim recited the “objectives and operations” of the circuit); *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1295, 1301 (Fed. Cir. 2014) (finding “heuristic [for performing a function]” to be sufficiently definite structure because the patent described the operation and objectives of the heuristic); *Collaborative Agreements, LLC v. Adobe Sys.*, No. 15-cv-03853-EMC, 2015 U.S. Dist. LEXIS 161809, at *11-*24 (N.D. Cal. Dec. 2, 2015) (determining “code segment [for performing a function]” to be sufficiently definite structure because the claim described the operation of the code segment); *Finjan, Inc. v. Proofpoint, Inc.*, No. 13-cv-05808-HSG, 2015 U.S. Dist. LEXIS 162504, at *31-*32 (N.D. Cal. Dec. 3, 2015) (determining “processor [for performing a function]” to be sufficiently definite structure because the claim described how the processor functions with the other claim components).

In addition, the specification states that the client device may be “a computer, a smartphone, and/or another hardware that may be configured to initiate contact with a server to make use of a resource.” ’668 Patent at 5:66–6:2. The specification further states that the client device may include a memory, processor, security sandbox, executable environment, and sandboxed application. *See, e.g., id.* at 6:2–6, 9:65–67, Figure 1. The specification further indicates that the client device is connected to networked devices, a relevancy-matching server, pairing server, intermediary server, and/or content identification server. ’668 Patent at 5:54–6:15,

11:3–11, 11:45–12:4, 13:23–39, 19:28–56; 25:50–26:34; Figures. 1–3, 7, 11. The specification also states that the client device may use executable code, may be a mobile phone on a cellular network, and may have a Media Access Control (MAC) address. ’668 at 18:40–57, 19:4–12, 21:5–11, 21:31–37, 23:30–24:22, 3, 40:2–5, 40:45–48. Accordingly, a person of ordinary skill in the art would understand that “the claim language, read in light of the specification, recites sufficiently definite structure to avoid § 112, ¶ 6.” *Robert Bosch, LLC v. Snap-On Inc.*, 769 F.3d 1094, 1099 (Fed. Cir. 2014)

Moreover, the use of the word “client” in conjunction with the word “device” places an additional functional constraint on a structure otherwise adequately defined. *Personalized Media Communs., L.L.C. v. ITC*, 161 F.3d 696, 705 (Fed. Cir. 1998) (finding that the adjectival qualification “digital” further “narrows the scope of those structures covered by the claim and makes the term more definite.”), *see also Williamson*, 792 F.3d at 1351 (noting that “the presence of modifiers can change the meaning of” an otherwise nonce term.). For example, the Dictionary of Computer and Internet Terms defines “client” as “a computer that receives services from another computer.” Docket No. 99-11 at 5 (Dictionary of Computer and Internet Terms (11th ed., 2013)). This is consistent with the intrinsic evidence and the understanding of a person of ordinary skill in the art.

Regarding the term “networked device,” the claims themselves connote sufficiently definite structure by describing how the “networked device” operates within the claimed invention to achieve its objectives. For instance, claim 1 of the ’668 Patent recites that the networked device is configured to automatically announce a sandbox-reachable service of the networked device to a discovery module. Likewise, claim 9 further recites that the networked device is configured to automatically announce the primary data along with the sandbox-reachable service of the

networked device to the discovery module.⁴

Therefore, the claims themselves connote sufficiently definite structure by describing how the “networked device” operates within the claimed invention to achieve its objectives. *See, e.g., Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1319-21 (Fed. Cir. 2004) (finding “circuit [for performing a function]” to be sufficiently definite structure because the claim recited the “objectives and operations” of the circuit); *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1295, 1301 (Fed. Cir. 2014) (finding “heuristic [for performing a function]” to be sufficiently definite structure because the patent described the operation and objectives of the heuristic); *Collaborative Agreements, LLC v. Adobe Sys.*, No. 15-cv-03853-EMC, 2015 U.S. Dist. LEXIS 161809, at *11-*24 (N.D. Cal. Dec. 2, 2015) (determining “code segment [for performing a function]” to be sufficiently definite structure because the claim described the operation of the code segment); *Finjan, Inc. v. Proofpoint, Inc.*, No. 13-cv-05808-HSG, 2015 U.S. Dist. LEXIS 162504, at *31-*32 (N.D. Cal. Dec. 3, 2015) (determining “processor [for performing a function]” to be sufficiently definite structure because the claim described how the processor functions with the other claim components).

In addition, the specification states that the networked device may be “a geolocation device, a hygrometer, a thermometer, a barometer, an anemometer, a television, an audio device, a game console, a set top box, an other computer, and/or an other hardware connected by a number of communications channels that allow sharing of a number of resources and/or a number of information.” ’668 Patent at 6:16–22. The specification further describes the networked device as performing a number of sandbox reachable services using a processor and a memory. *Id.* at

⁴ The parties agree that “discovery module” means “software, hardware, firmware, and/or integrated circuit to detect devices and/or services on a network.”

16:24–30. The specification indicates that the networked device is connected to a client device, a relevancy-matching server, pairing server, intermediary server, and/or content identification server. *Id.* at 11:3–11, 11:45–12:4, 13:23–39, 19:28–56; 25:50–26:34; Figures 1–3, 7, and 11. The specification also states that the networked device may render media data, have a hardware address (*e.g.*, a MAC address), have a global unique identifier (GUID), and communicate via a local area network (LAN). *Id.* at 7:49–51, 13:51–67, 20:41–59, 21:1–4.

Moreover, the use of the word “networked” in conjunction with the word “device” places an additional functional constraint on a structure otherwise adequately defined. *Personalized Media Communs., L.L.C. v. ITC*, 161 F.3d 696, 705 (Fed. Cir. 1998) (finding that “the adjectival qualification “digital” further “narrows the scope of those structures covered by the claim and makes the term more definite.”), *see also Williamson*, 792 F.3d at 1351 (noting that “the presence of modifiers can change the meaning of” an otherwise nonce term.). Indeed, in support of its construction for “communication session,” Defendant argues that “a principal device that shares a communication session is called a ‘*networked device*,’ and the ‘Field Of Technology’ section of explains that the Asserted Patents relate to the ‘technical field of *networking*.’ ” Docket No. 104 at 15 (emphasis in original). Likewise, the Dictionary of Computer and Internet Terms defines “network” as “a set of computers connected together.” Docket No. 99-11 at 6 (Dictionary of Computer and Internet Terms (11th ed., 2013)). This is consistent with intrinsic evidence and the understanding of a person of ordinary skill in the art.

In summary, the claims at issue differ from those that simply recite a generic means or mechanism, without further description in the remaining claim language or the specification. *See Inventio AG v. Thyssenkrupp Elevator Ams. Corp.*, 649 F.3d 1350, 1359 (Fed. Cir. 2011) (“[T]his is not a case where a claim nakedly recites a ‘device’ and the written description fails to place

clear structural limitations on the ‘device.’”). As indicated, the ’668 Patent recites a claim term with a known meaning and also describes its objectives and operations in the claimed invention. Defendant has failed to rebut the presumption because it has not established that “client device” or “networked device” fails to connote sufficiently definite structure. Finally, in reaching its conclusion, the Court has considered the extrinsic evidence submitted by the parties, and given it its proper weight in light of the intrinsic evidence.

c) Court’s Construction

The Court construes the term “**client device**” to mean “**a computer, a smartphone, and/or another hardware that may be configured to initiate contact with a server to make use of a resource.**” The Court construes the term “**networked device**” to mean “**a geolocation device, a hygrometer, a thermometer, a barometer, an anemometer, a television, an audio device, a game console, a set top box, an other computer, and/or an other hardware connected by a number of communications channels that allow sharing of a number of resources and/or a number of information.**”

6. “the processor is configured to match a targeted data with a primary data based on a relevancy factor associated with a user”

<u>Disputed Term</u>	<u>Plaintiff’s Proposal</u>	<u>Defendant’s Proposal</u>
“the processor is configured to match a targeted data with a primary data based on a relevancy factor associated with a user”	<p><u>Claimed Functions:</u> “match a targeted data with a primary data based on a relevancy factor associated with a user”</p> <p><u>Corresponding Structure(s), Act(s), or Material(s):</u> U.S. Patent No. 9,026,668 at Fig. 1; 5:66–6:15, 9:65–11:2, 11:53–12:4, 12:62–13:8, 13:29–39, 19:38–56, 25:32–49, 25:61–26:10, 30:48–61, 31:10–28, 31:49–58, 50:50–51:3, and equivalents thereof.</p>	<p><u>Claimed Function:</u> ’668 (claim 21): “match a targeted data with a primary data based on a relevancy factor associated with a user”</p> <p><u>Corresponding Structure that performs the Claimed Function(s):</u> None. Indefinite for failure to disclose sufficient corresponding algorithm(s) and/or other structure for performing the claimed function.</p>

a) The Parties' Positions

The parties dispute whether “processor is configured to” is subject to § 112 ¶ 6. Defendant contends that the term is a means-plus-function term governed by § 112(6) because it recites insufficient structure to perform the recited function.” Defendant further contends that the term is indefinite because the specification does not recite an algorithm that performs the recited function. Defendant argues that a person of ordinary skill in the art would understand that the recited general purpose processor requires special programming to perform the recited functions. Docket No. 104 at 31. Defendant further argues that Courts have concluded that a “processor” that is “configured to” perform a function recites a function without reciting structure, and is subject to § 112(6). *Id.* (citing *Personal Audio, LLC v. Apple, Inc.*, 2011 WL 11757163, at *21-22 (E.D. Tex. Jan. 30, 2011) (Clark, J.); *St. Isidore Research, LLC v. Comerica Inc.*, 2016 WL 4988246 (E.D. Tex. Sept. 19, 2016) (Payne, M.J.)). According to Defendant, this limitation should similarly be construed as a means-plus-function term because a processor may only perform this function with specialized programming. Docket No. 104 at 32.

Plaintiff responds that the “processor” element is not a means-plus-function element because a person of ordinary skill in the art would understand the term to have sufficiently-definite structure. Docket No. 99 at 34. Plaintiff argues that where a processor is located and how it interacts with other components is sufficient structure to avoid § 112, ¶ 6. *Id.* According to Plaintiff, claim 21 of the '668 Patent describes the processor as part of a server and coupled to memory. *Id.* at 34-35. Plaintiff also contends that the specifications describe the processor as a part of a computer system. *Id.* at 35 ('668 Patent at 5:66–6:15, 9:65–11:2, 11:53–12:4, 12:62–13:8, 13:29–39, 19:38–56, 25:32–49, 25:61–26:10, 30:48–61, 31:10–28, 31:49–58, 50:50–51:3, Figure 1; Docket No. 99-13 at 27-28).

In the alternative, Plaintiff argues that if § 112, ¶ 6 is found to apply to the processor

element, the Asserted Patents recite structure corresponding to the claimed functions. Docket No. 99 at 35. Plaintiff also argues that the steps described in the identified portions of the Asserted Patents constitute specific algorithms that could be implemented on a general-purpose computer if required. *Id.*

For the following reasons, the Court finds that the phrase “**processor is configured to**” is not subject to subject to § 112 ¶ 6, and should be given its plain and ordinary meaning.

b) Analysis

The phrase “processor is configured to” appears in claim 21 of the ’668 Patent. The Court finds that the term is not subject to § 112 ¶ 6. Claim 21 does not recite the word “means.” Moreover, the claim itself connotes that the term “processor is configured to” is structural by describing how it is included in the “relevancy-matching server,” and how it is “communicatively coupled” to a memory. Claim 21 of the 668 Patent recites “[a] relevancy-matching server comprising: a processor; and a memory communicatively coupled to the processor.” Claim 21 further recites how the processor enables the “relevancy-matching server” to operate within the claimed invention to achieve its objectives. Indeed, claim 21 of the ’668 Patent recites that the processor of the relevancy-matching server is configured to match a targeted data with a primary data based on a relevancy factor associated with the user.

Claim 21 further recites that the relevancy-matching server is configured to match the targeted data with the primary data in a manner such that the relevancy-matching server is configured to search a storage for at least one of a matching item and a related item based on the relevancy factor comprising at least one of a category of the primary data, a behavioral history of the user, a category of the sandboxed application, and an other information associated with the user. Thus, the claim itself connotes sufficiently definite structure by describing how the

“processor is configured to” operate within the claimed invention to achieve its objectives.

In addition, the specification states that the processor may be “a central processing unit (CPU), a microprocessor, an integrated circuit such as an application-specific integrated circuit (ASIC), a hardwired electronic logic circuit, a discrete element circuit, a programmable logic device such as a field-programmable gate array (FPGA), and/or another part of a computer system that carries out the instructions of a program.” ’668 Patent at 10:34–45. The specification further states that “the relevancy-matching server 200 may be a computer hardware system dedicated to matching, using a processor and a memory, a targeted data 800 with the primary data 500 based on a relevancy factor associated with the user 902.” *Id.* at 11:55–60. Like the claims, the specification connotes sufficiently definite structure by describing how the processor operates within the claimed invention to achieve its objectives. Accordingly, a person of ordinary skill in the art would understand that “the claim language, read in light of the specification, recites sufficiently definite structure to avoid § 112, ¶ 6.” *Robert Bosch, LLC v. Snap-On Inc.*, 769 F.3d 1094, 1099 (Fed. Cir. 2014). Defendant has failed to rebut the presumption because it has not established that “processor is configured to” fails to connote sufficient structure. Finally, in reaching its conclusion, the Court has considered the extrinsic evidence submitted by the parties, and given it its proper weight in light of the intrinsic evidence.

c) Court’s Construction

The term “**processor is configured**” is not subject to subject to § 112 ¶ 6, and will be given its plain and ordinary meaning.

7. “instructions stored in the memory and executed using the processor configured to”

<u>Disputed Term</u>	<u>Plaintiff’s Proposal</u>	<u>Defendant’s Proposal</u>
“instructions stored in the	<u>Claimed Function(s):</u>	<u>Claimed Function(s):</u>

<p>memory and executed using the processor configured to”</p> <p>“a set of instructions when executed through a machine using a processor and a memory to comprise the operations of:”</p>	<p>“match primary data generated using a fingerprint data with targeted data, based on a relevancy factor comprising at least one of a category of the primary data, a behavioral history of a user, a category of a sandboxed application, and another information associated with the user”</p> <p>“search a storage for the targeted data”</p> <p>“match the targeted data with the primary data in a manner such that the relevancy- matching server is to search the storage for at least one of a matching item and a related item based on the relevancy factor”</p> <p>“matching primary data generated from a fingerprint data with targeted data, based on a relevancy factor and to search a storage for the targeted data using the processor communicatively coupled with the memory”</p> <p>“matching the targeted data with the primary data in a manner such that the relevancy-matching server is to search the storage for at least one of a matching item and a related item based on the relevancy factor comprising at least one of a category of the primary data, a behavioral history of a user, a category of a sandboxed application, and an other information associated with the user”</p> <p><u>Corresponding Structure(s), Act(s), or Material(s):</u></p>	<p>’356 (claims 10, 11, 18, 19): “match primary data generated using a fingerprint data with targeted data, based on a relevancy factor comprising at least one of a category of the primary data, a behavioral history of a user, a category of a sandboxed application, and another information associated with the user”</p> <p>’356 (claims 10, 11, 18, 19): “search a storage for the targeted data”</p> <p>’356 (claim 11, 19): “match the targeted data with the primary data in a manner such that the relevancy-matching server is to search the storage for at least one of a matching item and a related item based on the relevancy factor”</p> <p>’356 (claim 14): “matching primary data generated from a fingerprint data with targeted data, based on a relevancy factor and to search a storage for the targeted data using the processor communicatively coupled with the memory”</p> <p>’356 (claim 14): “matching the targeted data with the primary data in a manner such that the relevancy-matching server is to search the storage for at least one of a matching item and a related item based on the relevancy factor comprising at least one of a category of the primary data, a behavioral history of a user, a category of a sandboxed application, and an other information associated with the user”</p>
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	U.S. Patent No. 9,386,356 at Fig. 1; cols. 7:49–11:38, 12:46–14:31, 15:24–36 19:21–30, 19:62–20:3, 20:19–21:8, 22:3–9, 22:29–36, 22:54–61, 23:32–44, 27:64–28:34, 29:39–53, 31:42–33:6, 35:28–41, 38:65–39:11, 41:50–42:5, 43:53–67, 44:44–45:18, 45:36–46:7, 46:43–48:63, 49:65–50:42, 51:5–19, 51:39–59, and equivalents thereof.	<u>Corresponding Structure that performs the Claimed Function(s):</u> None. Indefinite for failure to disclose sufficient corresponding algorithm(s) and/or other structure for performing the claimed function(s).
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a) The Parties' Positions

The parties dispute whether the “instructions” terms are subject to § 112 ¶ 6. Defendant contends that the terms are means-plus-function terms governed by § 112(6) because they recite insufficient structure to perform the recited function.” Defendant further contends that the term is indefinite because the specification does not recite an algorithm that performs the recited function. Specifically, Defendant argues that neither the claims nor the specification provide any description of how the “output” of the generic “instructions . . . configured to” limitation may be achieved. Docket No. 104 at 33 (citing Docket No. 104-1 at 95–131). Defendant further argues that Plaintiff cites no authority that supports its argument that mere disclosure of a function constitutes “sufficient structure for performing that function,” as required by *Williamson* to avoid § 112(6). Docket No. 104 at 33. According to Defendant, Plaintiff has not identified any disclosure in the ’356 Patent that describes how the “instructions configured for” operates within the claimed invention. *Id.* at 34.

Plaintiff responds that the “instructions stored in memory and executed using the processor” element is not a means-plus-function element because a person of ordinary skill in the art would understand the term to have sufficiently-definite structure. Docket No. 99 at 28-29. Plaintiff argues that the claims of the Asserted Patents describe how the instructions operate within the claimed invention to achieve its objectives. *Id.* (citing ’356 Patent at claim 10). Plaintiff

further argues that the Asserted Patents provide further structure when describing the processor and memory. Docket No. 99 at 30 (citing Docket No. 99-13 at 22–23; ’356 Patent at 11:27–38). Plaintiff also contends that the Asserted Patents confirm that the “instructions stored in the memory and executed using the processor” element recites sufficient structure. Docket No. 99 at 30) (citing ’356 Patent at 4:39–60, 7:49–11:38, 12:46–13:12, 13:33–14:8, 14:21–31, 15:24–36, 20:29–21:8, 27:64–28:34, 29:39–53, 31:42–33:6, 35:28–41, 38:65–39:11, 41:50–42:5, 43:53–67, 44:44–45:18, 45:36–46:7, 46:43–48:63, 49:65–50:42, 51:5–19, 51:39–59; Figure 1; Claims 1, 3, 10, 11, 14, 18, 19; Docket No. 99-13 at 22-23).

Plaintiff also argues that claim 14 of the ’356 Patent is a method claim that requires step-plus-function analysis, including a determination of whether the alleged steps provide guidance on how to perform the steps. Docket No. 99 at 30. According to Plaintiff, a claim element that merely describes the result of a step is likely a step-plus-function element, where elements including acts describing how to accomplish a function are not step-plus-function elements. *Id.* Plaintiff argues that claim 14 is not a step-plus-function claim because it recites acts. *Id.* at 31 (citing Docket No. 99-13 at 22).

In the alternative, Plaintiff argues that if § 112, ¶ 6 is found to apply to “instructions stored in the memory and executed using the processor” element, the Asserted Patents recite structure corresponding to the claimed functions. Docket No. 99 at 31. Plaintiff also argues that the steps described in the identified portions of the Asserted Patents constitute specific algorithms that could be implemented on a general-purpose computer if required. *Id.*

For the following reasons, the Court finds that the phrases **“instructions stored in the memory and executed using the processor configured to”** and **“a set of instructions when executed through a machine using a processor and a memory to comprise the operations of:”**

are not subject to subject to § 112 ¶ 6, and should be given their plain and ordinary meaning.

b) Analysis

The phrase “instructions stored in the memory and executed using the processor configured to” appears in claim 10, 11, 18, and 19 of the ’356 Patent. The Court finds that the phrase is used consistently in the claims and is intended to have the same general meaning in each claim. The phrase “a set of instructions when executed through a machine using a processor and a memory to comprise the operations of” appears in claim 14 of the ’356 Patent. The Court further finds that the phrases are not subject to § 112 ¶ 6.

None of the claims recite the word “means.” Moreover, the claims themselves describe how the instructions operate within the claimed invention to achieve its objectives. For example, claims 10 and 18 of the 356 Patent recites that the instructions are configured to match primary data generated using a fingerprint data with targeted data, based on a relevancy factor. Claims 10 and 18 further recite that the instructions are configured to search a storage for the targeted data. Claims 11 and 19 of the ’356 Patent further recite that the instructions are configured to match the targeted data with the primary data in a manner such that the relevancy-matching server is to search the storage for at least one of a matching item and a related item based on the relevancy factor.

By reciting the objectives of the “instructions . . . configured to,” and how the code operates within the context of the claimed invention, the claim language connotes sufficiently definite structure to one of skill in the art. *See, e.g., Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1319-21 (Fed. Cir. 2004) (finding “circuit [for performing a function]” to be sufficiently definite structure because the claim recited the “objectives and operations” of the circuit); *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1295, 1301 (Fed. Cir. 2014) (finding “heuristic [for performing a function]” to be sufficiently definite structure because the patent described the

operation and objectives of the heuristic); *Collaborative Agreements, LLC v. Adobe Sys.*, No. 15-cv-03853-EMC, 2015 U.S. Dist. LEXIS 161809, at *11-*24 (N.D. Cal. Dec. 2, 2015) (determining “code segment [for performing a function]” to be sufficiently definite structure because the claim described the operation of the code segment); *Finjan, Inc. v. Proofpoint, Inc.*, No. 13-cv-05808-HSG, 2015 U.S. Dist. LEXIS 162504, at *31-*32 (N.D. Cal. Dec. 3, 2015) (determining “processor [for performing a function]” to be sufficiently definite structure because the claim described how the processor functions with the other claim components).

Turning to the phrase “a set of instructions when executed through a machine using a processor and a memory to comprise the operations of,” the Court notes that this phrase appears in claim 14 of the ’356 Patent. Claim 14 is a method claim, which requires step-plus-function analysis. This includes making a determination of whether the alleged steps provide guidance on how to perform the steps. *See O.I. Corp. v. Tekmar Co.*, 115 F.3d 1576, 1582–83 (Fed. Cir. 1997). Specifically, “[i]f a claim element recites only an underlying function without acts for performing it, then § 112, P 6 applies even without express step-plus-function language.” *Seal-Flex, Inc. v. Athletic Track & Court Constr.*, 172 F.3d 836, 850 (Fed. Cir. 1999). On the other hand, elements including acts describing how the function is accomplished are not step-plus-function elements. *Id.* at 849–50.

Claim 14 is not a step-plus-function claim because it recites acts describing how the function is accomplished. Specifically, the claimed instructions stored in the memory and executed using the processor perform the acts of “matching primary data . . . with targeted data, based on a relevancy factor,” “search a storage for the targeted data,” and “matching the targeted data with the primary data in a manner such that the relevancy-matching server is to search the storage for at least one of a matching item and a related item based on the relevancy factor”

Accordingly, the Court finds that the phrase is not governed by 35 U.S.C. § 112, ¶ 6, and needs no further construction. Finally, in reaching its conclusion, the Court has considered the extrinsic evidence submitted by the parties, and given it its proper weight in light of the intrinsic evidence.

c) Court’s Construction

The phrases **“instructions stored in the memory and executed using the processor configured to”** and **“a set of instructions when executed through a machine using a processor and a memory to comprise the operations of:”** are not subject to subject to § 112 ¶ 6, and will be given their plain and ordinary meaning.

8. **“the sandboxed application is configured to gather the primary data from the networked device through the communication session” / “the embedded object is configured to gather the primary data from the networked device through the communication session”**

<u>Disputed Term</u>	<u>Plaintiff’s Proposal</u>	<u>Defendant’s Proposal</u>
“the sandboxed application is configured to gather the primary data from the networked device through the communication session”	<p><u>Claimed Function(s):</u> “gather the primary data from the networked device through the communication session”</p> <p><u>Corresponding Structure(s), Act(s), or Material(s):</u> U.S. Patent No. 9,026,668 at Figs. 2, 5–8; Figs. 1–8; 3:19–28, 5:66–6:15, 7:61–10:33, 10:52–58, 12:21–13:22, 14:52–15:11, 16:1–18:30, 18:58–19:3, 19:13–27, 20:60–67, 23:12–29, 24:5–42, 37:42–59, 40:6–31, 50:50–51:3, and equivalents thereof.</p>	<p><u>Claimed Function:</u> ’668 (claims 4, 14, 24): “gather the primary data from the networked device through the communication session”</p> <p><u>Corresponding Structure that performs the Claimed Function:</u> None. Indefinite for failure to disclose sufficient corresponding algorithm(s) and/or other structure for performing the claimed function.</p>

<p>“the embedded object is configured to gather the primary data from the networked device through the communication session”</p>	<p><u>Claimed Function(s):</u> “gather the primary data from the networked device through the communication session”</p> <p><u>Corresponding Structure(s), Act(s), or Material(s):</u> U.S. Patent No. 9,026,668 at Figs. 1, 2 (item 204), 5 (item502), 6 (item 600), 7 (item706), 8 (item 204); cols. 6:32–9:64, 10:59–11:52, 12:21–13:22, 14:66–17:65, 18:10–21:45, 27:24–40, 38:21–44, 40:32–50, 40:59–41:14, and equivalents thereof.</p>	<p><u>Claimed Function:</u> ’668 (claims 4, 14, 24): “gather the primary data from the networked device through the communication session”</p> <p><u>Corresponding Structure that performs the Claimed Function:</u> None. Indefinite for failure to disclose sufficient corresponding algorithm(s) and/or other structure for performing the claimed function.</p>
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a) The Parties’ Positions

The parties dispute whether the term “sandboxed application is configured to” and the term “embedded object is configured to” are subject to § 112 ¶ 6. Defendant contends that the terms are means-plus-function terms governed by § 112(6) because they recite insufficient structure to perform their recited functions. Defendant further contends that the terms are indefinite because the specification does not recite algorithms that perform the recited functions. Specifically, Defendant argues that neither the sandboxed environment in which an application is executed nor “executable code” connotes any structure to the software or application itself. Docket No. 104 at 35 (citing Docket No. 104-1 at 131–153). Defendant contends that sufficient structure cannot be found by repeating the function of this limitation or other limitations. Docket No. 104 at 35.

Regarding the “embedded object” phrase, Plaintiff responds that the “embedded object” element is not a means-plus-function element because a person of ordinary skill in the art would understand the term to have sufficiently-definite structure. Docket No. 99 at 32. Plaintiff argues that the Asserted Patents describe an embedded object as a script, image, player, iframe, or other external media included in the sandboxed application. *Id.* (citing ’668 Patent at 12:22–25, 12:31–

41, 12:42–61; Figure 6; Claims 14, 24). According to Plaintiff, the Asserted Patents confirm that the term embedded object recites sufficient structure. (Docket No. 99 at 32) (citing ’668 Patent at 2:31–45, 3:19–28, 11:45–52, 12:21–41, 13:9–22, 15:32–50, 18:58–19:3, 20:60–67, 21:38–45, 27:24–40, 38:21–44, 40:32–50, 40:59–41:14; Figures 2, 5, 8; Claims 1, 3, 4, 11, 13, 14, 21, 23, 24; Docket No. 99-13 at 24-25). Plaintiff further argues that the extrinsic evidence also supports the structure of embedded object in the specifications and as understood by a person of ordinary skill in the art. Docket No. 99 at 32 (citing Docket No. 99-13 at 25-26).

Regarding the “sandboxed application” phrase, Plaintiff responds that the “sandboxed application” element is not a means-plus-function element because a person of ordinary skill in the art would understand the term to have sufficiently-definite structure. Docket No. 99 at 33. Plaintiff argues that the Asserted Patents describe a sandboxed application as “an untested code, an untrusted program (e.g., from an untrusted web page), and/or an other software that can be executed with an appropriate runtime environment of the security sandbox.” *Id.* (citing ’668 Patent at 10:52–58, 14:66–15:11, 6:2–6, 12:21–41; Figure 1). Plaintiff further argues that the specifications show that the term sandboxed application recites sufficient structure. Docket No. 99 at 33 (citing ’668 Patent at 3:19–28, 5:66–6:15, 7:61–10:33, 10:52–58, 12:21–13:22, 14:52–15:11, 16:1–18:30, 18:58–19:3, 19:13–27, 20:60–67, 23:12–29, 24:5–42, 37:42–59, 40:6–31, 50:50–51:3; Figures 1–8; Docket No. 99-13 at 26–27). Plaintiff contends that the Asserted Patents provide further structure when describing how the sandboxed application may gather primary data from the networked device through the communication session. Docket No. 99 at 33. (citing ’668 Patent at 6:32–9:42; Docket No. 99-13 at 26-27).

In the alternative, Plaintiff argues that if § 112, ¶ 6 is found to apply to the embedded object element, the Asserted Patents recite structure corresponding to the claimed functions. Docket No.

99 at 32. Plaintiff also argues that the steps described in the identified portions of the Asserted Patents constitute specific algorithms that could be implemented on a general-purpose computer if required. *Id.* at 33.

Similarly, Plaintiff argues that if § 112, ¶ 6 is found to apply to the sandboxed application element, the Asserted Patents recite structure corresponding to the claimed functions. *Id.* at 34. Plaintiff also argues that the steps described in the identified portions of the Asserted Patents constitute specific algorithms that could be implemented on a general-purpose computer if required. *Id.*

For the following reasons, the Court finds that the phrases **“the sandboxed application is configured to gather the primary data from the networked device through the communication session”** and **“the embedded object is configured to gather the primary data from the networked device through the communication session”** are not subject to subject to § 112 ¶ 6, and should be given their plain and ordinary meaning.

b) Analysis

The phrase “the sandboxed application is configured to gather the primary data from the networked device through the communication session” appears in claims 4, 14, and 24 of the ’668 Patent. The Court finds that the phrase is used consistently in the claims and is intended to have the same general meaning in each claim. The phrase “the embedded object is configured to gather the primary data from the networked device through the communication session” appears in claims 4, 14, and 24 of the ’668 Patent. The Court finds that the phrase is used consistently in the claims and is intended to have the same general meaning in each claim. The Court further finds that the phrases are not subject to § 112 ¶ 6.

Regarding the “embedded object” phrase, the specification states that an embedded object

may be a script, image, player, iframe, or other external media included in the sandboxed application. '668 Patent at 3:19-21, 12:22-25. In claims 4, 14, and 24, the embedded object is either an executable code or a statically rendered object. This is illustrated in Figure 5 (Image 502) and Figure 6 (Executable Code 600) of the '668 Patent. According to the specification, when the embedded object comprises executable code, it may gather primary data through the communication session between the client and networked devices by querying a number of reachable devices for the data. *Id.* at 12:35–41. When the executable code is a script, the script may use an extension or the pairing server to discover and query the networked device for the primary data. *Id.* at 12:42–61. The specification provides examples, including one where the script pulls a JavaScript code that performs an HTTP GET request to a URL. *Id.* at 12:42–61. Thus, the intrinsic evidence connotes sufficiently definite structure by describing how the “embedded object” operates within the claimed invention to achieve its objectives.

Indeed, the parties have agreed to a construction for the term “embedded object,” and the claims recite that when the embedded object is an executable code, the embedded object is configured to gather the primary data from the networked device through the communication session.

Regarding the “sandbox application” element, the specification states that the sandboxed application may be “an untested code, an untrusted program (e.g., from an untrusted web page), and/or an other software that can be executed with an appropriate runtime environment of the security sandbox.” *Id.* at 10:52–58. The specification also states that a web browser is another example sandboxed application. *Id.* at 15:2–4. The specification further describes the sandboxed application as existing within the security sandbox of the client device. *Id.* at 10:52-53, Figure 1.

The specification adds that the client device may execute the sandboxed application in the

executable environment using the processor and the memory. *Id.* at 6:2–6. Furthermore, the specification states that the embedded object may exist within the sandboxed application. *Id.* at 12:21–22. Thus, the intrinsic evidence connotes sufficiently definite structure by describing how the “sandbox application” operates within the claimed invention to achieve its objectives. Indeed, the parties have agreed to a construction for “sandbox application,” and the claims recite that when the embedded object is a statically rendered object, the sandboxed application is configured to gather the primary data from the networked device through the communication session. Finally, in reaching its conclusion, the Court has considered the extrinsic evidence submitted by the parties, and given it its proper weight in light of the intrinsic evidence.

c) Court’s Construction

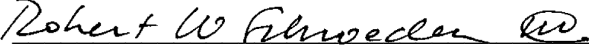
The phrases **“the sandboxed application is configured to gather the primary data from the networked device through the communication session”** and **“the embedded object is configured to gather the primary data from the networked device through the communication session”** are not subject to subject to § 112 ¶ 6, and will be given their plain and ordinary meaning.

VI. CONCLUSION

The Court adopts the above constructions. The parties are ordered to not refer, directly or indirectly, to each other’s claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any part of this opinion, other than the definitions adopted by the Court, in the presence of the jury. However, the parties are reminded that the testimony of any witness is bound by the Court’s reasoning in this order but any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

It is SO ORDERED.

So ORDERED and SIGNED this 29th day of March, 2017.


ROBERT W. SCHROEDER III
UNITED STATES DISTRICT JUDGE